B 730 a 1 WEE/1 (1)

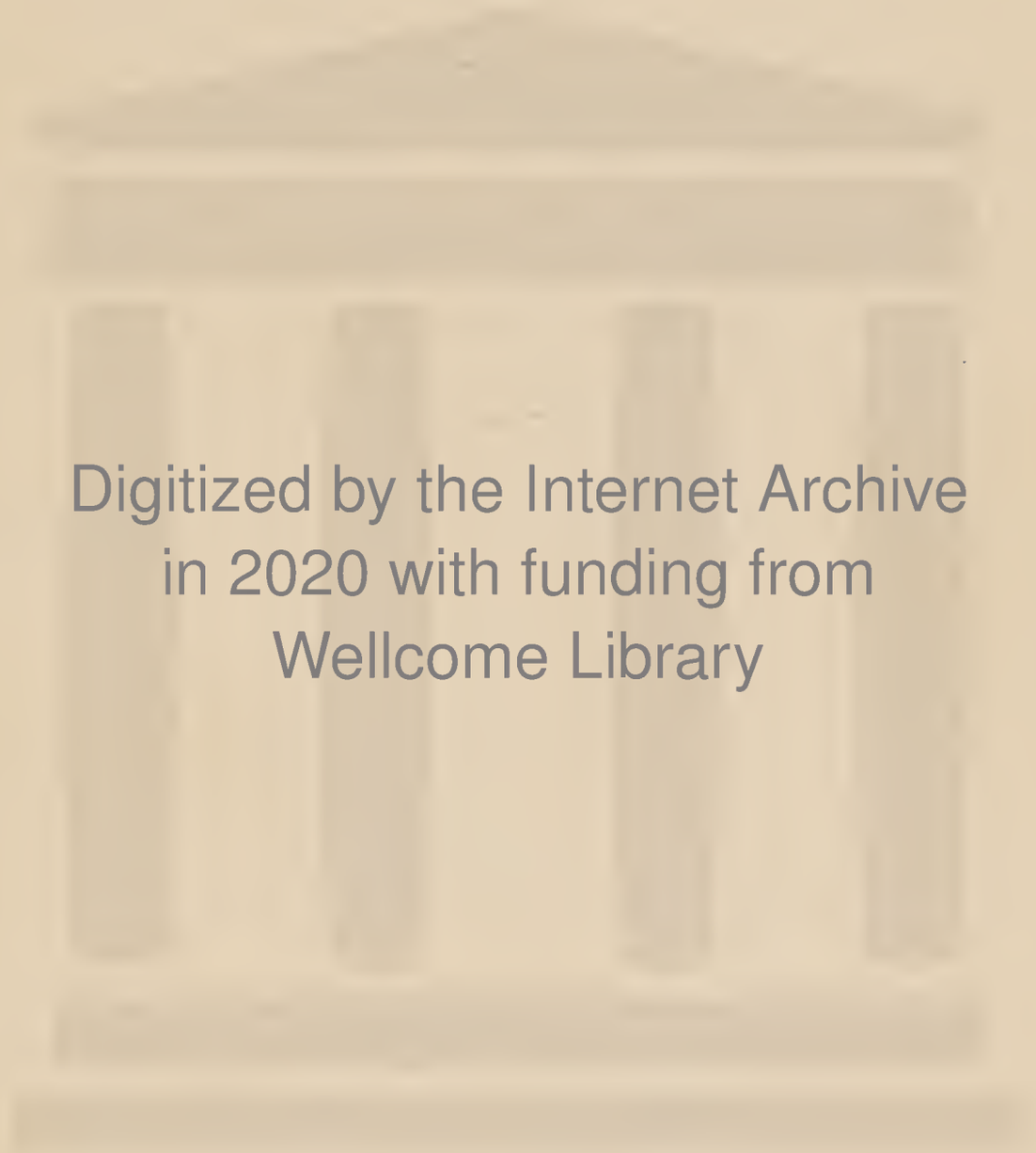
Le Fanu 73

contents

vol. 1: 8 Feb 1823 — 19 July 1823 pp. 384 (nos 1-24)
vol. 2: 26 July 1823 — 15 November 1823 pp 272 (nos 25-41)
vol. 3: 9 January 1824 pp 1-46 (no 41)
24 January 1824 pp 33-48 (no 42)
31 January 1824 pp 49-64

contains: Monthly Medico-Chirurgical Review and chemico-Philosophical Magazine.

Includes portrait of Dr Gall facing vol. 1 p. 1.



Digitized by the Internet Archive
in 2020 with funding from
Wellcome Library

https://archive.org/details/s1id11857860

THE

WEEKLY

MEDICO-CHIRURGICAL

AND PHILOSOPHICAL

MAGAZINE;

CONTAINING

A SELECT VARIETY

OF THE

MOST RECENT INTELLIGENCE

RELATING TO THE DIFFERENT

BRANCHES OF MEDICAL SCIENCE,

&c. &c. &c.

VOLUME I.

London:

PRINTED FOR COX AND SON,

St. Thomas's Street, Southwark.

Sold also by SHERWOOD, NEELY, and JONES, Paternoster Row; SIMPKIN and MARSHALL, Stationers' Court; JOHN COX, Berner's Street, Oxford Street; CALLOW and WILSON, Gerrard Street, Soho; W. STEWART, South Bridge Street, Edinburgh; Hodges and M'Arthur, Dublin, &c. &c.

1823.

Printed by E. Justins, 41, Brick Lane, Spitalfields.

Page.

Extraction of a Living Fœtus from a Dead Mother, by Mr. Green and Dr. Blundell, &c. .....
Inflammation and Retroversion of the Uterus, by Dr. Robertson, of Glasgow 61
Epilepsy—the Eltriated Oxyd often given, by Dr. Shearman..... 62
A Phillipic to the compilers of the Monthly Periodical, called "Medical Intelligencer," &c..... 61
Hydrocephalus, an extraordinary case of, in St. Thomas's Hospital, plate, &c. p. 64 72
Abernethy, John, on his Circular relative to Resurrection Men, at the London Tavern 74
Engraving and Description of Guy's Hospital, &c. 81
Heads of an Oration delivered by Mr. E. Grainger, Lecturer on Anatomy and Physiology, Maze Pond, Borough, delivered March the 8th, being the Fifteenth Anniversary Meeting of the London Medical Society, p. 84 102
Provincial Monument to Dr. Jenner 94
Uterine Hæmorrhage, by R. Gooch, M. D..... 105
Lectures at the Royal College of Surgeons..... 110
On Dislocation of the Thigh, from Sir A. Cooper's, Bart. Work on Dislocations and Fractures..... 113
New Method of removing Ascarides from the Human Body, by Mr. Howson, M. D. Lecturer on Materia Medica, Pharmacy, &c. 120
Example of a remarkable Fact in Midwifery. By James Scott, Esq. Surgeon, Westminster..... 142

Page

Proceeding of Philosophical and Learned Societies, Universities, &c. p. 143, 144, 176, 224, 239, 255, 272, 351
Dr. Gall's Lectures on the Physiology of the Brain, p. 241, 257, 273—On the Functions of the Brain, p. 247, 289, 305, 321, 337, 350, ... 369
On the Employment of Belladonna in various diseases, &c. 299
Extract of a Letter from Edinburgh 302
Annual Report of the Vaccine Establishment 303
Medico-Botanical Society..... 303
Dr. Gall's Dissection of the Brain, p. 304 317
Systems on Digestion, from the 2nd volume of Majendie's Physiology, translated by J. S. Forsyth, Surgeon, &c. 319
Dublin Hospital Reports, p. 326.... 340
History of Dyspepsia, from Dr. Gregory's Theory and Practice of Physic 328
On Elaterium. By Dr. Kinglake .. 331
Dilatation of the Female Urethra .. 333
Weiss' new improved Surgical Instrument 333
On the Preservation of Public Health p. 362 378
Report of the Northumberland, Durham, and Newcastle Infirmary for Diseases of the Eye 366
Price Current of East India Drugs, for June, 1823..... 367
Reveiw of an Essay on the Baleful Influence of so frequently washing ship's decks, &c..... 370
Practical Observations, with Cases of Severe Burn. By Joseph Swan, Esq. .....

HOSPITAL REPORTS, &c.

Guy's Hospital—Operations by Sir A. Cooper, Bart. Amputation of the Penis and a lower extremity, p. 8—Amputation above the knee—Removal of a large fungoid Tumour from the forearm and schirrous breast—Extraordinary case of chronic Hydrocephalus, p. 72—Operation of Trephining for compression—Singular case of Fungus Hæmatodes, p. 213, 229—Amputation in a case of congenital club foot—Removal of a Steatomous tumour, by Sir A. Cooper, Bart.—Further particulars of the case of fungus Hæmatodes given in No. 15, p. 302—Operation for carcenoma Penis—Lithotomy, &c. &c. .....
St. Thomas's Hospital.—Ligature of the Subclavian Artery by Mr. Travers—Lithotomy by Mr. Green and Mr. Tyrrell—Mode of operating in securing the Subclavian Artery above the clavicle—Hospital Reports, p. 40—Operation for Strangulated femoral Hernia, by Mr. Aston Key—Cataract by Mr. Travers, &c. &c.—(Cæsarian operation at Limerick) p. 90—Amputation of the left arm by Mr. Green, &c. p. 106—Amputation below the knee by Mr. Tyrrell—Case of swallowing sulphuric acid—Fracture with depression—Amputation—Aneurism of the Femoral Artery, &c. p. 167-8—Lithotomy p. 230—Popliteal Aneurism, by Mr. Tyrrell .....
St. Bartholomew's.—Operation for Femoral Aneurism, by Mr.

Page

Abernethy—Sir A. Cooper's method of operating, &c. 6, 7

London Hospital.—Amputation of the right leg below the knee, by Mr. W. Harkness—Operation for Strangulated Hernia, by Sir W. Blizard—Amputation of both legs, p. 90—Removal of internal half of a female breast—Two operations for (females) strangulated Hernia—Lithotomy, by Mr. Andrews—Hare lip, by Sir W. Blizard—Extraction of the Eye, by Mr. Headington ..

St. George's Hospital.—Ligature of the left Subclavian, by Mr. Brodie—Lithotomy by Mr. Ewebank — Peculiar Fungus in Talbot's Ward, p. 89, 90—Further particulars of the operations of Strangulated Hernia and Ligature of the Subclavian Artery, p. 105—Particulars of a case of extra-uterine Gestation..... 159

Edinburgh Royal Infirmary.—Removal of a tumour of the Scrotum, weighing 44½ lbs. by Mr. Liston—Operation for Femoral Hernia—a cancerous Tumour, p. 72—Case of Catalepsy, p. 104—Removal of a cartilaginous tumour by Mr. Wishart—Fatal cases of Puncture in Dissection 132, 133

Dublin Hospital Reports.—Cases of Aneurism in the Richmond Surgical Hospital, by Charles H. Todd, Esq. one of the senior Surgeons to that Establishment 326, 340

DIRECTIONS FOR THE BINDER TO PLACE THE PLATES.

Royal College of Surgeons..... 1
Guy's Hospital 6
Phrenological Views 33
Mr. Weiss's improved Aneurism Needle..... 49
Extraordinary case of Hydrocephalus..... 65
Catalogue of Labels at the end.
Case of Fungus Hæmatodes 229
Portrait of Dr. Gall, opposite page..... 1

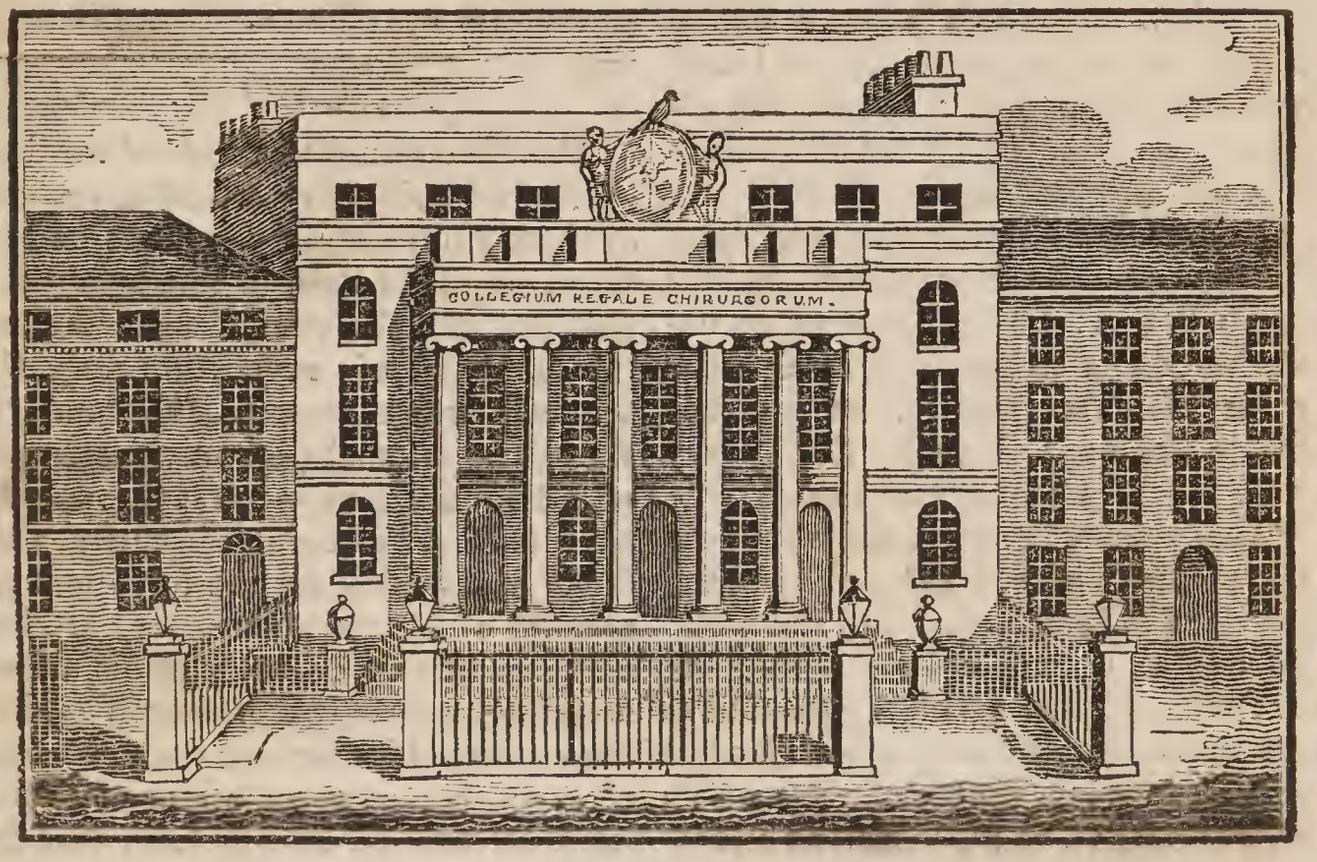
THE WEEKLY

MEDICO-CHIRURGICAL & PHILOSOPHICAL MAGAZINE.

No. I. SATURDAY, FEBRUARY 8, 1823. *Price* 4*d*.

"FLORIFERIS, UT APES, IN SALTIBUS OMNIA LIBANT
OMNIA NOS, ITIDEM, DEPASCIMUR AUREA DICTA"

SURGEONS' HALL.



UNTIL the year 1809, surgeons were united by virtue of the old charter granted by Henry VIII. by which they stood incorporated with the BARBERS: but at the time alluded to, they obtained a new one, which constituted them a separate body; since which, various legislative and other enactments and regulations *inter se*, have been adopted and put in force to promote their utility and indivisible respectability. Notwithstanding all these wise measures, we can still *boast* of hordes of BARBER-*ous Surgeons*, whose propensity for the *Old School* seems undiminished, as well as determined never to be annihilated, by all the projectiles of the new one.

Surgeons' Hall, or the Royal College of Surgeons, is a dignified edifice of the IONIC ORDER, with an elegant portico, on the frieze of which are inscribed the words "COLLEGIUM REGALE CHIRURGORUM," &c. On the summit are placed the arms of the college, supported by Machaon and Podalirius, sons of Æsculapius.

The interior of the Royal College is grand, spacious, and commodious; the museum is an extensive building, of an oblong form, with galleries. Amongst its valuable materials is the admirable and extensive collection of the great JOHN HUNTER, purchased by order of government. "In this collection," to use the words of Sir Everard Home, "we find an attempt to expose to view the gradations of nature, from the most

simple state in which life is found to exist, up to the most perfect and most complex of the animal creation,—man himself." It contains preparations of the human body in a healthy, a natural, and a morbid state; with a variety of the preternatural sportiveness of Mother Nature, in her varied shapes and forms. It contains also a rare and extensive collection of objects of Natural History, which, through the medium of comparative anatomy greatly contribute to physiological and pathological illustration. There is also a considerable arrangement of mineral and vegetable productions; amounting altogether to upwards of 20,000 specimens and preparations.

The museum likewise contains many valuable contributions made by Sir Joseph Banks: 500 specimens of natural and diseased structure, presented by Sir William Blizard; with considerable augmentations to the library by Sir Everard Home and others.

Among the many curiosities that are to be met with here, may be enumerated the wife of the celebrated Van Butchel,* laid out in a long square mahogany box; the spaces of which are filled with a certain preservative composition; but over the face is a square of glass which can be removed at pleasure. The features are entirely preserved; and it is justly considered a curious specimen of what art can accomplish.

Twenty-four lectures are, at least, delivered annually at this college, called "The Museum Lectures," in pursuance of the agreement made with government when the Hunterian collection was presented to it. There are also Anatomical Lectures, called Arris' and Gales' Lectures," according to the intention of alderman Arris and Mr. Gale, who bequeathed funds for that purpose: independent of these the Hunterian Oration, recently instituted, is delivered every 14th of February.

The library is only accessible to the members of the college; and it is difficult to gain permission to view the Museum without being introduced by one of this body.

The other buildings connected as appendages to this learned institution, possess equal merit, by uniting a successful combination of utility with architectural excellence.

* The story runs that a considerable fortune became alienated upon the *interment* of *Vrow* Van-Butchel, which proved a stimulus too powerful for *Meinherr*, the doctor, to prevent him from paying the last sad offices to his rib, by putting her safe under ground. In this manner he kept possession of the property while he *preserved* his wife.

DESCARTES.

The fallacy, not to speak of the danger, of adhering to particular systems or modes of reasoning, cannot be better exemplified than in this celebrated philosopher; for whom, nevertheless, the honour of revolutionizing the sciences was reserved. The man, in short, who astonished the civilized world with his doctrines,—burst through the clouds of peripatician obscurity, subdued every mind by the force and ingenuity of his reasoning, and attracted them by the brilliancy of his understanding, was not proof himself against the equivocal inductions deduced from the hypothetical speculations of a warm and enthusiastic imagination, that delight in soaring beyond the sublimest heights of philosophy, only to make the descent more remarkably rapid, and strikingly tremendous.

Descartes, the father of transcendant geometry, was the first who employed analysis, that immense step, and one much bolder than any pursued after him, by Newton and others. Had he stopped short here, or had he better known his own strength, he, most undoubtedly, would have been the greatest man that ever lived, but, like a sun that can hide itself among the fogs and clouds which it dissipates, Descartes lost himself and dishonoured reason, by carrying his speculativeness far beyond the horizon of either truth, reason, or probability. Addicted to the most frivolous and wire-drawn theo-

ries, he greatly retarded the progress of physic, after having divested it of the dust of the schools. The dupe of his own ideas, which experience seldom enlightened, he died a philosophical death for the very want of philosophy itself. The pruriency of Descartes for hypothetical reasoning, or rather hypothetical quibbling, was a death blow to medicine; since then, physicians have only employed themselves in chimerical speculations and arbitrary explanations, believing it sublime to aspire to first causes; and like Phæton, to lose their hold and drop into the other extreme.

Passing over the bridge, at Stockholm, Descartes was seized with a severe fit of cold, on which he reasoned in the following manner; "cold" said he, "condenses fluids and all other bodies—heat, on the contrary, rarefies them; brandy consequently must be a specific in this case: let us drink some then." He drank largely and died. This is what is commonly reported concerning the death of this great philosopher. Goris, however, states, that it was occasioned by drinking his favourite rarefier—brandy—during a fever; notwithstanding the advice, to the contrary, of his physician; who, nevertheless, according to Voltaire (Lettr. Ph.) and others, mortally hated him.

He persuaded himself, medically speaking, that like cures its like, *i.e.* that diseases were to be cured by adopting a medicament, or regimen, similar to the cause of which the disease is a consequence, and not by opposite modes of treatment. Others pretend, and which is more probable, that, like Sylva, his death was accelerated by his resolutely refusing to be blooded, in a hot fever, until it was too late. Such is the history of this celebrated man, yet we see, nevertheless, how much a single fact, relative to him, is obscured in doubt and uncertainty. But what may not be said, and with equal probability, of a man, extravagant enough to imagine, that he had found out a diet that would prolong his life 500 years.

If this great philosopher, as he is styled, had injected spirits of wine into the veins of a dog, he would have learnt that it coagulates the blood; consequently he would have refrained from brandy in excess, as a *rarefier* of the fluids. On the other hand, had he tried at what degree of heat the blood ceases to circulate, he would have submitted to the lancet; and would also have been equally sparing of the *water of life*. If other proof were wanting, this would be sufficient to shew, that those who presume to treat themselves or their patients according to their own bare conjectures, will turn out, like Descartes; philosophers either at their proper cost, or that of their dupes; or, what is more likely, they will prove to be no philosophers at all.

Unfortunately for the science of medicine, even at the present day, we have too many Cartesian physicians. Theory upon theory—hypothesis upon hypothesis—it would appear, that without Aristotle, good sense is still blind; and that reason was again in her dotage.

Hippocrates gave an example which, unfortunately, his disciples, hitherto, have neglected to follow. He only collected facts; and his collection is immense: it of necessity follows, that he must have had considerable assistance in his herculean undertaking; for the life of a single man could not have been sufficient to complete the task he imposed upon himself. The labours of this great physician pourtray a vast and expansive intellect—a sure and perspicuous judgment, blended with a sagacity and comprehension that nothing could elude.

Erastratus, Aretæus, and other great men of antiquity marched in his steps. Galen drew upon the same fund; but his thirst for reasoning and explaining every thing, came to him at a time, when physic was in its dawn, and when the science of medicine was confined to mere quackery and absolute

ignorance; consequently, limited within a very narrow sphere. The Arabians still more than Galen, disfigured medicine; which, in their hands, was merely a subtle and punctilious kind of philosophy, where every thing was decided before the tribunal of authority and the imagination.

There is scarcely any thing more true, than that it is impossible for the most luminous theory to open to our view the real causes of disease; and, that it is a kind of maniacal enthusiasm, bordering on absolute folly, to have recourse to hypotheses for such elucidations. In fine, where can there exist a greater and more dangerous abuse of reason, than that of choosing an uncertain cause from among a multiplicity of many others equally possible? Is not a species of reasoning of this description, tantamount to abandoning mankind to the danger of a system—to the rocks and shoals of consequences, boldly drawn from frivolous conjecture; above all, when these conclusions are given, rashly deduced from principles gratuitously supposed certain, as sure and infallible rules?

Instead, therefore, of foolishly attempting to soar upon the miserable pinions of our own imagination, rather let us grope in the path of good sense. Our art, as Boerhaave says, in the preface to his Institutions, will be less extended by it, but it will be rendered more certain—let us confine ourselves, when reasoned method abandons us, to the immoveable science of facts—let us search for new ones—let us confine them incessantly by the greatest exactitude in observing well—rare latents! (with which few physicians are gifted) but which consist, nevertheless, not only in seeing precisely what is in nature, but all that belongs to her.

It is not enough to establish a fact; it is necessary to know how that fact establishes itself—what is it that supports it—and, in a word—what are its variations. If our *system builders* and *theorizers* would give themselves this trouble, they would have little occasion to substitute baseless fabrics for unperishable facts—and—for indisputable fact—things which have never been seen or heard of, except in their own phrenzied imaginations, at least very rarely, by any one. It is in this manner, that the mind, pre-occupied with some favourite system, commonly sees less that which exists, than that which it is in pursuit of; and thus it takes, at all hazard, every appearance, however fallacious, for reality. J. S. F.

Heads of Lectures *on Ulcers, with Remarks and Observations thereon, by* Mr. John Abernethy, Sir Astley Cooper, Sir E. Home; *&c. &c. &c.*

An ulcer is a chronic solution of substance, attended with an unhealthy discharge either of pus or sanies, or a matter otherwise vitiated. An ulcer differs from a wound in the following leading circumstances; viz.—its state of inflammation; the nature of the discharge, and its want of tendency to heal.

Ulcers are properly divided into two kinds; the local, and the constitutional: the former is a consequence arising from a morbid fault in the structure; the latter is connected with a general taint of the habit. The absorption of granulations which fill the cavities of ulcers, causes a puckering on the surface: when the diseased action is at an end, reparation takes place by granulations forming and filling the chasm, when a skin forms and perfects the cure:—no part of the body is as perfectly reproduced as before the injury. Where you cannot see an ulcerated surface, its healthy or unhealthy appearance is to be judged of from the pus it discharges. Dr. Crawford analysed Ichor, and found it to contain Hydrogeneous sulphur. Sordes are a thick discharge that adhere to the surface of wounds. Mr. A. thinks that granulations produce skin; but people in general believe that skin can only produce skin. Simple ulcers that

are weak, have no disease, but are merely produced by simple weakness.

The ulcer of the irritable kind, in its first state, has its edges ragged and hard. Broad and flat granulations, are extremely indolent, and are very susceptible of inflammatory action: weakness threatens the life of the part; and when this weakness is undisturbed, it becomes indolent; and, if disturbed, it becomes irritable. When ulcerated legs are in a horizontal position, the granulations are of a florid colour; but, if the patient be desired to place his foot on the ground, they become of a purple; which shews that the circulation, in this position, cannot be carried on with sufficient energy. Bandaging is the best mode of treatment; this makes equal and regular pressure on the weak and distended vessels. When the skin is irritable, the sticking plaister will produce sores. There should also be local pressure. In irritable sores sticking plaister will be of service, as there is no doubt the irritability proceeds from weakness; it gives support to the languid vessels. Sometimes when the skin is very irritable Mr. A. applies fine linen and sticking plaister over it. The bandage is not to be restricted to one or the other bad leg, as it seems equally applicable to all.

The only treatment required when an ulcer is in an healthy state (which is known by the florid appearance, and the edges of the sore approximating on its surface,) is to apply lint to it, which in a few days will come off, when granulations will be discovered under it, with a quantity of secreted pus deposited on the surface of the sore: then apply poultices; as, by their gentle stimulus, they assist the rising of the granulations, and are of more utility than simple unctous dressings. In a few days more the granulations rise as high as the edges of the skin; then lint must be applied with some simple ointment, such as that composed of only oil and wax, taking care at the same time, the lint does not touch the edges, as it would greatly impede the healing of the parts, by preventing the shooting of the granulations to the skin. The formation of a scab on the surface will be best prevented by the poultice.

Ulcers produced from a morbid peculiarity dependent on the general health.

Persons in the hospital had sores of this kind, which were treated with the warm bath and chalybeates. Mr. A. desired that the wounds should be dressed with salve and poultices, to soothe them: he administered diet drinks with the blue pill every other night; and by attending to the state of the stomach and bowels they got well.

Sir Everard Home has said that hemlock is of service in some sores, salt and water in others; which sores he supposes to be of the scrophulous kind. The only dressings in these sort of sores that are of service, are those of the most soothing kind; but the constitution, which is the principal thing, must be attended to. *Bark, Metallic Salt, Argent Nitrat, Cupri Vitriolat., Flor. Sulp.*, are the principal remedies. There are many applications which act as cordials, such as *balsamic arsenic*, which is of peculiar service, as it causes new action and produces sloughing much sooner than any preparation of silver, but be careful in applying poisonous medicine to sores; as there are no surfaces so liable to absorption as the surface of a wound; for instance, a mercurial dressing or two, in some constitutions, might cause salivation. Weak acids, applied to the sores have a very good effect, but they must be very considerably diluted; as, in this state they prevent putrifaction. The principles upon which ulcers are to be treated, are as follow:—apply soothing applications to relieve their irritability; then gentle stimulating applications of the metallic kind; by this means you bring the ulcer from an irritable to a sluggish state; and it is on this account,

that these metallic stimulants are to be applied: they cause pain at first, but the good they do is soon obvious.

Impediments to the healing process.

We are told that some superficial healthy ulcers are not so disposed to heal when kept moist and unexposed to the atmosphere, as when they become dry and covered with a scab. Mr. Home, in his work on this subject, discountenances the use of the poultice.

The first impediment to the healing of ulcers is, when the granulations are too luxuriant, and rise above the edge of the skin; forming, what is commonly called, fungous flesh. In these cases, bandages are proper, and even a thin sheet of lead applied over them, will be found useful: should this plan not arrest their farther progress, it will be necessary to have recourse to caustic applications round the edges only of the ulcer; the part is afterwards to be covered with lint.

Another obstacle is when the granulations become too sluggish, and assume a glossy aspect; this prevents the coagulable lymph from being rendered vascular, and is the consequence of this semi-transparent appearance, marking a languid constitution, and want of energy in the vascular system: such granulations grow with greater rapidity than in the healthy ulcer, are larger, and do not possess that firmness in texture, and produce an action above what the patient is able to support. In this case it becomes necessary to improve the constitution by tonics, bark, steel, and a generous diet. Stimulating ointments are also requisite to rouse the indolent parts: such as the red nitrate of quicksilver, from 5 to 10 grains, mixed with an ounce of lard. Vitriolic lotions may also be used; 2 grains of the sulphate of zinc to an ounce of distilled water; or the diluted nitric acid in the proportion of two drops to an ounce of the same. A light roller, at the same time should be applied, as increasing the vigour of the circulation, giving due support, and producing a determination of blood to the parts.

Sir Everard Home has very justly remarked in this case, that ulcers which heal while the patient walks about are not so apt to recur, as those which are healed up in a state of quiescence. An inflamed state of the parts will also retard the healing process; the treatment then will consist in poultices, fomentations, rest, and mild aperients.

According to Sir Everard Home, irritable ulcers are described as having the margin of the surrounding skin jagged, and terminating in a sharp and undermined edge, the bottom of which is made up of different sized concavities, with no distinct appearance of granulations, but a whitish spongy substance, covered with a thin ichorous discharge. The surface of the irritable ulcer readily bleeds. Ulcers which occur on the malleolus externus, on the ligament of the patella, and the anterior surfaces of the tibia are generally of this kind. He also conceives the periosteum to be the seat of this ulcer. *(To be continued.)*

HOSPITAL REPORTS.

OPERATIONS.

ST. BARTHOLOMEW'S.

Jan. 17. External iliac artery, tied again by Mr. Abernethy.

This operation is usually performed for FEMORAL ANEURISM high up; viz. —where the sac commences below pouparts ligament, between its lower edge and the arteria profunda. The pulsation is commonly very strong. Pouparts ligament forms the boundary above the aneurism, superior to which the artery is sound, and is the part selected for securing the vessel.

Relative position of the external iliac artery.—The external iliac vein runs along its inner side, at the same time, rather behind it. The anterior crural nerve accompanies it a good way to its outer side; but close to

pouparts ligament, where the ligature is to be applied, it is very nearly in contact with it; and just before the external iliac artery, terminates in the femoral, it is situated immediately behind the external abdominal ring, which is placed midway between the pubis and superior spinous process of the ilium.

As the great merit of having first suggested and performed this operation, (as well as that of tying the common carotid) belongs to Mr. John Abernethy; we conceive, that the very least we can do, in honour of so eminent a character, is to give the mode in which he performs the operation.

This gentleman makes an incision three inches in length through the integuments of the abdomen, commencing a little above pouparts ligament, extending it upwards, rather more than half an inch to the outer side of the abdominal ring, in order to avoid the epigastric artery:—this exposes the fascia or aponeurosis of the external oblique, which he divides in a similar direction; and thus brings into view the internal oblique. The finger is now introduced before the inferior margin of the internal oblique and transversalis muscles, which, to the extent of an inch and a half, are divided with a crooked bistoury. Two fingers are then introduced beneath the peritoneum, which are carried upwards by the side of the Psoas muscle, so as to touch the artery, which is readily distinguished by its pulsations, about two inches above pouparts ligament. It is necessary here to make a slight incision on each side, to detach it from its fascia, that the finger may be inserted under it, while two ligatures, by means of an eyed-probe, are passed; one of which is secured upwards as far as the artery is detached; the other some distance lower down; and the vessel divided midway between them: the wound attempted to be united by the adhesive process.

Sir A. P. Cooper's mode of operating is somewhat different from this. He recommends the incision to be made above the abdominal ring, in a *semi-lunar form* (thus deviating from the first method of making it parallel with direction of the artery) carrying it in the direction of pouparts ligament, which serves as a guide; within an inch and a half of the spine of the ilium: this exposes the tendon of the obliquus externus; he then carries the knife above the ligament, so as to expose the obliquus internus. Now laying aside the knife, he introduces his fingers beneath the spermatic chord, under which the artery lies. It becomes necessary here to separate distinctly the artery from the surrounding substance, which runs on its inner side; and the best method to do this, is by means of a director moved a little from side to side, until it become insinuated underneath the artery, which is secured in the same manner as in the former operation, either by one or two ligatures.

In Mr. Abernethy's first case of this description, one ligature was used and no division made. In the two succeeding, two ligatures were employed, and the artery divided. The late Mr. Freer, of Birmingham, and Mr. Tomlinson, used but one ligature, and no division, and both were successful. Sir Astley Cooper has since repeatedly and successfully operated on this vessel; even in cases where the aneurismal sac was in a sloughy state, and having an eschar formed on it. In one of Sir Astley's cases, the ligature was applied between the arteria profunda and pouparts ligament: fourteen days afterwards the man died of hæmorrhage; from which it would appear, that, if a ligature be applied near a considerable branch, as was the case in this instance, it prevents adhesion from taking place, in consequence of the flow of blood washing away the bond of union.

ST. THOMAS'S.

Jan. 17. Subclavian artery tied by Mr. Travers, assisted by Mr.

Green—subject operated upon, upwards of 60 years of age.

Lithotomy. Two cases—both under six years—one performed by Mr. Green, using the gorget—the other by Mr. Tyrril, using the knife.

Operation *for securing the Subclavian artery above the clavicle.*

Relative position of the artery—This vessel runs between the scalenus muscles, (anticus and medius) directly upon the first rib, under the clavicle into the axilla. The subclavian vein s situated in front, and a little below the level of the artery, from which it is separated by the scalenus anticus. The nerves constituting the axillary plexus are, for the most part, placed above the level of the artery. The outer edge of the sterno-masloid muscle is placed, as near as possible, in front of the scalenus anticus, to which it may serve as a guide.

The first step in the operation is to depress the arm as much as possible; by which the artery is rendered more superficial. An incision* is then to be made, at least, three inches in length, just above the upper part of the clavicle; beginning it at the sternal side of the outer edge of the sterno mastoid muscle—this simply divides the skin, and brings into view the fibres of the plastysma myo-hyoideus, which are to be divided with great caution, least the external jugular vein be wounded. This being done, a quantity of fat and cellular membrane is exposed, filling up the cavity behind the clavicle; which is to be separated by the handle of the knife, assisted with the finger. Now passing the finger deep down into the wound, upon the first rib, the pulsations of the artery are felt, just as it passes out beneath the clavicle into the axilla. Passing the ligature, the most difficult part of the operation; two are advised, if there be room to make them, between which the vessel is to be divided upon a director.

In a well marked aneurism of the axillary artery, where the clavicle is much elevated, as was the case in the present instance,* the operation is very difficult; but under the common circumstances, where the clavicle is in its situation, it is by no means so.

There is considerable difficulty in passing a ligature under this artery, and in separating it from the nerves: many very ingenious instruments have been invented for this purpose. A curved eye-probe generally serves the purpose as well as any—great care during the operation must be taken, to avoid including any of the cervical nerves; and, if performed on the left side, the thoracic duct must be borne in mind, as including it in the ligature would soon prove fatal. When one ligature is only applied, there appears to be no necessity to divide the vessel.

Guy's, *Jan.* 25.

Amputation of the penis, by Sir Astley Cooper.

———— of a lower extremity, ditto.

PHYSIOLOGICAL OBSERVATIONS.

Phenomena of Muscular Contraction. *Translated from the French of* Majendie.

When a muscle contracts, its fibres, more or less suddenly, shorten and become hard; and, without any preparatory oscillation or hesitation; they suddenly acquire such a degree of elasticity, that they are enabled to vibrate or produce sounds. The colour of the muscle does not seem to change at the time it contracts; but it has a certain

---

* Mr. Travers made an angular incision by letting fall a perpendicular one, along side the outer edge of the sterno mastoid muscle upon the first, made above the clavicle—the flap was dissected back, &c.

* *We regret to state, that notwithstanding the able hands under which this important operation was performed, (which occupied upwards of two hours) it did not turn out successful—the patient died the second or third day.*

tendency to be displaced, which is resisted by the aponeuroses. It has been disputed whether a muscle is more voluminous during its relaxed or contracted state; and, although we consider this circumstance by no means satisfactorily established, it is happily of no very great importance. All the sensible phenomena of muscular contraction take place in muscles; but it is no less certain, that they cannot be developed unless the brain and nerves contribute their assistance.

If the brain of a man or a brute be compressed, the power of muscular contraction is lost—and, if the nerves running to a muscle are cut, it becomes instantly paralysed. Of the changes that may occur in the muscular structure, in a state of contraction, we are completely in the dark; and in this respect, it resembles the vital actions, of which no explanation can be given; notwithsanding the frequent hypothetical attempts that have been made to explain them, but without success.

In muscular contraction we observe four things; viz. its intensity—duration—rapidity, and extent.

The intensity of muscular contraction, or in other words, the degree of force with which the fibres shorten, is regulated by the action of the brain—it is in general subject to the will, within limits which vary in each individual.

A particular organisation of the muscles favours the intensity of the contractions; such as a voluminous firm fibre, of a deep red, with transverse striæ. With the same act of volition, these would produce effects much stronger than muscles with delicate, smooth, and colourless fibres. If, however, to such fibres be added a very strong cerebral power, or a great degree of strength of volition, the contraction will acquire a much more remarkable degree of intensity; so that the cerebral influence on the one hand, and the disposition of the muscular structure on the other, constitute the two elements of the intensity of muscular contraction.

A very energetic cerebral action is seldom combined with a disposition of muscular fibres favourable to the intensity of contraction. The proportion of these two elements is generally inverse. When they are combined, astonishing effects are produced. This combination probably existed in the athletæ of antiquity; and, at present, is considerably observed in rope dancers.

By the influence of the brain solely, muscular power may be carried to an extraordinary degree: we know the strength of an enraged man—of maniacs, of persons in convulsions, &c.

The duration of contraction is subject to the will; it must not, however, be prolonged beyond a certain period, which varies in different individuals; for we then experience a sense of fatigue, at first but slightly marked, but afterwards increasing till the muscle refuses to contract any longer. The period at which this unpleasant feeling commences, is proportioned to the intensity of the contraction, and the weakness of the individual. To obviate this inconvenience, the different movements are so ordered that the muscles may act in succession, the contraction of each being but of short duration; hence the reason we cannot stand long in one particular posture; and why an attitude requiring the strong and continued contraction of a small number of muscles cannot be preserved more than a few moments. The sense of fatigue which ensues upon muscular contraction, is dissipated by inaction; and after some time the muscles again resume their power of contraction.

Within a certain extent the quickness of contraction is subjected to central influence: this is proved by the manner of our common motions; but beyond this degree, the quickness of contraction evidently depends upon habit. To illustrate this, let any one examine the difference with respect to rapidity of motion, between a man who touches a piano for the first time, and

one who has been for some years in the habit of playing upon the same instrument. Some very remarkable individual differences are seen, with respect to quickness of contraction, both in our common movements, and those which are acquired only by practice.

Volition directs the extent of contraction, which, however, must necessarily vary with the length of fibres; for long fibres have a greater extent of contraction than short ones.

From what has been said, it would appear, in general, that the WILL has great influence over muscular contraction, at the same time, it is indispensable to it; as in many circumstances, motions occur, not only without the concurrence of the WILL, but in direct opposition to it; many remarkable instances of this kind take place from habit, passions, and diseases.

Muscular contraction, however, such as we have here described, must not be confounded with the modifications which it experiences in disease, as in convulsions, spasms, tetanus, wounds of the brain, &c. neither must it be confounded with the POST MORTEM appearance of muscles: phenomena no doubt which it must be amusing to study, but by no means deserving the importance which Haller and his disciples attached to them; and above all, they must not be blended under the term irritability, with the other modes of contraction, particularly that of the muscles, which occur in the animal œconomy.

Muscular contraction modified by age.—The muscles cannot be distinguished from the gelatine-like matter which forms and constitutes the embryo, before the commencement of the second month; nor do they present at this period, the characters which they possess in the adult. They are of a pale grey, slightly tinged with red, and receive but a small portion of blood compared with the quantity they afterwards contaic. They grow and are developed during the progressive growth of the body; but this evolution is not strongly marked, so that at birth they are slender and but little expanded: those, however, of digestion or respiration must be excepted, which require, and in fact have a much more striking increase.

During infancy and youth, the nourishment of the muscles increases, but they grow principally in length; hence in infancy and adolescence, the shape is rounded, slender, and agreeable,and nearly the same in the female state. In the adult, the shape changes again; the muscles increase in thickness, are strongly marked under the skin, and greatly augmented in bulk; the spaces between them being no longer filled up with fat; prominences and depressions are formed, which give the body an appearance altogether different from that of youth. The muscular substance becomes firm, its red colour deepens, its chemical nature is modified; for daily experience proves that soup made with the flesh of young animals has a taste, colour and consistence very different from those made of the flesh of those that are full grown which appears to contain more fibrine, or omazome, colouring matter of the blood, consequently more iron.

The nutritive powers of the muscles sensibly decrease in old age. These organs diminish in volume, become pale, florrid and trembling; their contractility is weakened; the fibre becomes coriacious and difficult to be lacerated.

Muscular contraction undergoes nearly the same changes as the nourishment of the muscles. Weak and scarcely discernible is the fœtus, its activity increases at birth, and rapidly in infancy and youth; acquires its highest degree of perfection in the adult; and, at length, is entirely lost in the decrepit old man.

Experiments upon the roots of the spinal nerves.—From Magendie's Physiological Journal.

M. Magendie had been for some

time anxious to make an experiment, for the purpose of observing the effects of the section of the posterior roots of the nerves which have their origin in the spinal marrow. He had attempted it several times, but without being able to succeed, in consequence of the difficulty of opening the vertebral canal, without injuring the spinal marrow, and producing death, or, "at least severely wounding the animal." During the last month, however, a litter of puppies having been brought into his laboratory, he considered them proper subjects for a repetition of his experiments in opening the vertebral canal. With a single stroke of a very sharp scalpel, he laid bare the posterior half of the spinal marrow, covered with its envelopes. He then divided, with ease, the *dura mater* surrounding it, and exposed the posterior roots of the lumbar and sacral pairs; and by raising them with the blades of a pair of small scissors, he was enabled to cut them on one side, without injuring the spinal marrow: the wound was re-united by suture, and the animal watched. M. Magendie first believed that the limb corresponding to the divided nerves was entirely paralysed: it was insensible to punctures and the strongest pressure, and seemed likewise immoveable; but, to his great surprise, the animal began to move it, in a very apparent manner, although the sensibility was still quite extinct. A second and third experiment gave an exactly similar result. M. Magendie then began "to consider it probable, that the posterior roots of the spinal nerves might have different functions from the anterior, and that they were more particularly destined for sensibility."

He then thought of dividing the anterior roots, leaving the posterior untouched; but he found this easier to conceive than to execute. After some consideration, he decided upon attempting to pass before the posterior roots a species of cataract knife, the blade of which being very narrow, might permit him to cut the roots by pressing them with the edge of the instrument, upon the posterior part of the bodies of the vertebræ; but this plan he was obliged to relinquish, in consequence of the great veins which the canal on that side contained, and which were opened at each movement in advance. In making these attempts, he perceived, that towards the vertebral *dura mater* the anterior roots might be seen united into fascia, immediately before piercing the membrane: M. Magendie immediately divided all the pairs which he was desirous of doing, but, as in the preceding experiments, only cut those of one side, for the purpose of comparion: the limb became immediately lax and immoveable, whilst it unequivocally preserved its sensibility. He finally cut, at once, both the anterior and posterior branches, when there was an absolute loss of both sensibility and motion. "I have repeated and varied," adds M. Magendie, "these experiments in several species of animals: the results I have just mentioned have been confirmed in the most complete manner, both as regards the anterior and posterior roots. I am following up these researches, and shall give a more detailed account of them in the next number; it is enough for me, at present, to be enabled to assert positively, that the anterior and posterior roots of the nerves which spring from the spinal marrow have different functions; and that the posterior appear more particularly destined for sensibility, whilst the anterior seem more especially connected with motion."

(General Physiological Observations to be continued.)

MELANGE.

Fracture of Calculi in the Bladder.

An instrument has been invented, and, it is said brought to perfection in Paris by M. Amusat, the use of which is to break down calculi in the bladder, and render the fragments so small that they may be voided as gravel. The

instrument consists of pincers* which are confined in a tube not larger than a sound, until introduced into the bladder: they are then opened; the stone is seized with facility, and by moving the handles in a particular manner, is soon reduced to a powder. In a few seconds, a calculus the size of a nut is broken with facility. It appears, however, that hitherto the trial has only been made in a dead body; consequently it still remains to be learned what will be the result on a living one.

On the volatile oil of bitter almonds as a poison.—By M. Vogel, of Munich.

To deprive the oil obtained from bitter almonds, by distillation, of its hydro-cyanic acid, he agitated it with a concentrated solution of potash, and distilled it to dryness. The oil volatilized with the water, and the residuum in the retort, contained cyanide of potassium. To be certain that the oil was deprived of all its hydro-cyanic acid, he distilled it anew with potash; but this time the residuum contained no cyanide of potassium.

The volatile oil of bitter almonds, thus purified, is without colour, and heavier than water. Its taste is extremely acrid and burning; it crystallizes rapidly in contact with air; it dissolves easily in alcohol and ether, but only in very small quantity in water. The flame of its combustion is very brilliant, and accompanied with much smoke.

In order to find whether this oil, freed from its hydro-cyanic acid, was still poisonous, M. Vogel put a drop of it on the tongue of a sparrow; it died, after violent convulsions, in a few seconds. He poisoned a dog four months old with four drops of it. He hence infers, that this volatile oil, well purified, produces in animals deleterious effects, analogous to those of the hydro-cyanic acid, although in a feeble state.

Proper state of Prussic acid for medicinal use.—A series of experiments has been undertaken by a company of associated physicians, surgeons, and naturalists, at Florence, to determine the best state of the hydro-cyanic, or Prussic acid, for medicinal purposes. The experiments were made with great care, and varied several ways. Different preparations of the substance were used, rabbits being the animals on which they were tried. Their joint opinion is expressed as follows: "we then conclude, from our researches, that the essential oil of the Prunus Laura Cerasus, is to be preferred in practice, to all other preparations which contain the hydro-cyanic acid: for, unlike the distilled water of the plant, and pure Prussic acid, it contains the same proportion of the acid, and is of the same power, whether recently prepared or old, when made in one place or another, after exposure to the air, light, or heat. We also think that the oil of olives, or of almonds, is the most proper vehicle, in the proportion of an ounce to twelve drops of the essence: or in a smaller dose when employed by friction externally.—*Journal of Science.*

Test for Arsenic.

Dr. Cooper, President of Columbia College, finds a solution of chromate of potash to be one of the best tests for arsenic. One drop is turned green by the fourth of a grain of arsenic, by two or three drops of Fowler's Mineral Solution, or any other arsenite of potash. The arsenious acid takes oxygen from the chromate, which is converted into a green oxide. To exhibit the effect, take, says Dr. Cooper, five watch glasses; put on one, two or three drops

* An invention of this description cannot fail to immortalize its author; and, it may be truly said, that MONSIEUR ARMUSAT if he be the man destined to work the human quarry by means of his pincers, instead of the knife and gorget, has been amusing himself to some purpose; we hope however it may turn out that he *has not* been *amusing* us.

of a watery solution of white arsenic; on the second, an equal quantity of the arsenite of potash; on the third, one fourth of a grain of white arsenic in substance; on the fourth, two or three drops of solution of corrosive sublimate, either in water or alcohol; in the fifth, two or three drops of a solution of copper. Add to each, three or four drops of a solution of chromate of potash. In half an hour, a bright grass green colour will appear in number 1, 2, 3, unchangeable by ammonia; No. 4, will instantly exhibit an orange precipitate; No. 5, a green, which a drop of ammonia will instantly change to a blue.

Dr. Cooper however, does not recommend that this test shonld be exclusively relied on, but merely that it should be used in conjunction with others, of which the most unequivocal is certainly the actual exhibition of arsenic in a metalic form.

Oxalic Acid.—Among the numerous tests that have lately been submitted to the public through various channels for detecting this poison, which has so frequently been taken by mistake, and as often, most shamefully given for Epsom salts; perhaps the easiest, and one equally, if not more certain, to those whose fingers are not entirely callous to the different degrees of sensation, produced by heat and cold, has been overlooked. Epsom salts conveys a cold, watery, obtuse sensation to the finger, or skin of any other part of the body. Oxalic acid, on the contrary, communicates a kind of gritty and pointed feel, resembling coarse dry sand, without any very perceptible degree of either heat or cold.

So infallible does this test prove, that the gentlemen to whom we are indebted for the communication, undertook, a dozen repeated times, to distinguish the one from the other, by the feel, blindfolded; notwithstanding the various deceptions that were made use of to frustrate him, without being once deceived.

Inoculation and Vaccination. —Daniel Bernouilli calculated that the inoculation of the small-pox has been the means of prolonging human life by three years; and the new observations of Duvillard gave the same results from vaccination.

Flowers of the common Mallow. (Malva Silvestris.) *An excellent test of Alkali.* Messieurs A. Payer and A. Chevalier, state, that an alcoholic infusion of these flowers (previously dried by a steam heat out of contact of light) gives a sensible green tinge on being mixed with pure water containing $\frac{1}{200000}$ part of potash, $\frac{1}{1000}$ part of carbonate of soda, and $\frac{1}{25}$ of lime water.

According to the same chemists, the colouring matter of the fruit of the *cerasus mahaleb*, (wood of St. Lucie) is an exeellent test of acids; but inferior in delicacy to litmus. Infusions are more sensible to change of colour, than coloured paper.

Smalt in Sugar.—It appears in a note in the *Journal de Pharmacie* for October last, that the Parisian refined sugar contains sometimes a notable quantity of smalt, which falls to the bottom of the vessel in which that substance is dissolved. As the cobalt ore, from which smalt is made, generally contains arsenic, this sophistication is justly reprobated.

Salep and Magnesia.—Mr. Brandon of Hoxton, found that when twenty grains of Salep were dissolved in four ounces of water, and thirty grains of magnesia added, the whole became, after some hours, solid and jelly-like; and even after a month had not become the least putrid. Neither albumen, gum tragacanth, jelly nor starch, produced, with magnesia, the same effect. Nor does lime or white bole produce the same effect on salep. The jelly is insoluble in water, fat oils, oil of turpentine, alcohol, or caustic potash. Acid partly desolves it, the remainder being bulky and opalescent.

Affinity of Glass for Water.—Mons. Gay-Lussac mentions that the affinity of glass for water is so great, that, after being dried, it abstracts from air part of its hygrometric water.

Congelation of Mercury.—The same gentleman, (M. Gay-Lussac,) states in a memoir on the cold produced by the evaporation of fluids, that he has readily frozen mercury, by surrounding it with a figoriric mixture of ice and salt, in the apparatus in which aqueous vapour is produced and absorbed by the process of Mr. Leslie; and he has no doubt that, with analogous means and very vapourable liquids, a degree of cold might be produced below that which is the result of mixtures.

Mons. Kergaradec has lately published a small Memoir upon the application of auscultation* to the study of pregnancy. By means of the *Stethoscope* or pectoriloque of Læennec, he is of opinion, that the pulsations of the heart of the fœtus may be distinguished from those of the arteries of the mother; and that, by an attention to the different sounds communicated to the ear, we may determine, in doubtful cases, whether the fœtus *in uttero* be alive or dead. Mon. Kergarader and Læennec are both of opinion that the *Stethoscope*, and the immediate application of the ear, are attended with the same advantages, &c.

---

* This acuteness of auscultation reminds us of the old story of Hearwll, whose ear was so fine, that on applying it to the ground, he could distinctly hear the grass growing: or whether the Stethoscope's application to pregnancy may not have had its origin in another old tale of a certain *Silly Billy* who clapped his ear *(ad pudendum uxoris ejus)* to ascertain if he could hear the child cry, we know not. The French, it must be allowed, have ever taken the lead in *invention*. We cnnnot but admire the ingenuity, whilst we courteously smile at the extravagance of a number of imported ideas, which are swallowed and propagated with so much avidity and gravity, the moment they are engendered.

The North-West Expedition.—At the monthly meeting, on Tuesday the 7th ult., an interesting paper was read to the Literary and Philosophical Society, on the probable situation, condition, and prospects of Captain Parry and his brave fellow-adventurers. It showed the probability of their having succeeded in getting a passage through some inlet in the north-west of Hudson's Bay, since, if this had not been the case, they would have returned, or at least been heard of. If they should have got beyond the Copper Mine River the first summer, it is a subject of hope rather than expectation, that they may have passed Mackenzie's, and pushed through Behring's Straits; in which case we may expect intelligence very soon. But in this case probably Franklin would have heard of them. Or they may have been taken short by the climate before reaching the Pacific, and are now passing a second winter on this side of Behring's Straits; still a fair hope may be entertained of their ultimate safety; but it may be the end of this year, or the spring of the next, before we hear of them. Or, thirdly, they may not have been able to find a passage to the Pacific, and then the question is, can they get back to the Atlantic before the open weather closes; or have they the means of passing a third Polar winter? Various presumptions are in favour of this. But on a fourth, not improbable, supposition of damage to the ships, or deficiency of, or injury to, their resources, or sickness, disabling from exertion, their situation must indeed be wretched: and what ought the country, in contemplation even of its possibility, to do? First, to dispatch directions to the Governors of Canada, Hudson's Bay, and the North West Company, directing them to equip different parties of natives, with proper supplies to go in search, by the Copper Mine and Mackenzie's Rivers, and other routes, with a security of being rewarded at any rate, and munificently in case of success. Secondly, that two or three

small vessels be sent in different directions. Thirdly, that the Davis's Straits ships be encouraged to sail a fortnight or more before the usual time, and explore the coast before they come to the fishing-ground. These or any other expedients should be adopted, rather than a single chance be lost of saving these brave men.

OBITUARY.

With unfeigned sorrow we have to announce the death of our distinguished countryman, Dr. Jenner, the discoverer of vaccination. He expired on the morning of the 26th ult. after a very short illness, at his house at Berkeley, in the 74th year of his age. An event so awful from its suddenness, and so impressive and mournful, from the eminent qualities of him who has been thus removed from among us, demands an ampler notice than we now can give: but we cannot refrain from expressing our ardent hope, that due and ample honours will be paid to the memory of an individual, not less worthy of love for his private virtues, than of esteem and admiration as one of the greatest benefactors of mankind.

On Monday last died, at his house in Bedford Row, Charles Hutton, L. L. D. F. R. S. &c. in the 86th year of his age. This venerable character will be remembered with gratitude, as useful science is duly appreciated: perhaps no name can be mentioned, either ancient or modern, that has so successfully promoted those branches of mathematical knowledge, most conducive to the practical purposes of life, as Dr. Hutton. He has been an eminent author for upwards of sixty years, and, during forty of that period, he discharged the arduous duty of Professor of Mathematics, at the Royal Military Academy at Woolwich, with the highest honour to himself, and advantage to his country. His improvements in military tactics, have greatly promoted the success of the British artillery and engineers, for the last half century, and have been acknowledged and adopted by several of the first professors on the continent.

The following are the particulars relative to the recent lamented death of Dr. Pett, of Clapton. Communicated by Mr. Travers.

On Saturday morning about eight o'clock, (December 28th, 1822,) Dr. Pett assisted a medical friend to examine the body of a lady who died of peritoneal inflammation after child-birth on the preceding Thursday. At nine o'clock the same evening, being in his usual health and spirits, and while engaged at cards, he complained of an uneasiness in the middle finger of his right hand. On minute examination, a slight superficial wound was discovered. It was then touched with lunar caustic, and some time afterwards with a drop of sulphuric acid, neither of which applications was felt on going to rest; he again applied the lunar caustic to the wound for the space of half a minute, which application was followed by pain, so on increasing to intensity, and an hour after he had been in bed, he was attacked by a severe rigor, which continued more or less for three hours. The pain spread from the finger along the arm to the axilla, and was so agonising as to lead him to observe, that he had never before known what pain was. The night he described as one of dreadful suffering, without intermission. In the morning, the expression of his countenance, and the altered manner of the man, struck his medical friend with instant alarm. The finger was white and without sensation. At twelve o'clock on Sunday, an incision was carried through the wound to the bone, which was not felt by Doctor Pett. In the course of this day the arm became swollen, and the superficial absorbents conspicous from inflammation. The pain affecting the arm, extended to the axilla, and pectoral region. The finger in a few hours became discoloured and gangre-

nous as far as the second joint, where suppuration of the soft parts afterwards took place. The high excitement of the nervous system, marked by a flushed countenance, a ferrety eye, vigilance, great anxiety, short and quick respiration, rapid and voluble speech, and unnatural irritability of manner, were accompanied by a very moderate acceleration of the pulse, which soon became intermittent, and then irregular. On the morning of Tuesday, the arm had recovered its natural appearance; it was neither swollen nor painful; nor were any absorbent lines visible. A considerable effusion had taken place in the cellular substance of the axilla, and over the pectoral muscle; it was marked by an erethymatous blush, was painful and crepitated on pressure, as in emphysema. The symptoms varied but little; but increased difficulty, and hurry of respiration, and augmented feebleness, were marked at each visit. He expressed a sense of confusion; but there were no further evidence of disturbed intellect, than the deviation before adverted to, from his natural characteristic calmness. The fullness at the axillary edge of the pectoral muscle being sensibly increased on Wednesday morning, a lancet was plunged deeply into it, but only a bloody serum issued.

On Wednesday evening, about six o'clock, he died, having survived the injury about 105 hours. The body was inspected on Friday, and no recent morbid appearance whatever was discovered in the chest and abdomen. The heart was unusually large, and its substance flabby. The internal structure of the liver had undergone considerable chronic degeneration. The head was not examined.

Died, in London, Oct. 18th, aged Fifty-two, Dr. Alexander Marcet; long Physician of Guy's Hospital. He has left numerous valuable works behind him, to attest his industry and talents.

Died, early in January last, William Blair, Esq. late Surgeon to the Lock Hospital.

Died, lately, Dr. George Gilbert Curry, Senior Physician to St. Thomas's Hospital.

Dr. Roots has been elected Physician to St. Thomas' Hospital.

NEW PUBLICATIONS.

MAGENDIE'S PHYSIOLOGY; translating for the press. Vol. 2nd.

"A Treatise on the Epidemic Purpurial Fever, as it prevailed in Edinburgh, in 1821-2." By W. Campbell, M. D. 8vo.

"An Essay on the Medical efficacy and employment of the Bath Water." By E. Barlow, M. D. 8vo.

"Illustrations of the Enquiries respecting Tuberculous Diseases. By Dr. Bacon.

TO CORRESPONDENTS.

*** All letters and communications for this work are requested to be addressed (post paid) to the Publishers, for the Editors.

Gentlemen subscribing quarterly, or otherwise giving orders for the MEDICO-CHIRURGICAL AND PHILOSOPHICAL MAGAZINE to their Newsmen or Postmen, may have it forwarded, early on the day of Publication, to their residence, free of expence, within ten miles of London.

§ *Stamped for the Country.*

§*§ An Index to the work will be furnished at the proper season, of which due notice will be given.

† Communications received, but not inserted, will be faithfully returned on proper application being made for them.

†§† Each Volume of the Work will be accompanied with an approved Portrait of some eminent Professional Character: with intermediate Engravings of Morbid Anatomy, &c.

†§† The Editors beg leave to observe, that, with Correspondents of every description, the greatest confidence, honor, and secrecy, may be depended upon.

Printed by Plummer and Brewis, Love Lane, Eastcheap;

Published by COX and SON, St. Thomas's Street, and 39, High Street, Southwark. Sold also by Sherwood, Neely, and Jones, Paternoster Row; Simpkin and Marshall, Stationers' Court; Callow and Wilson, Prince's Street, Soho: John Cox, Berner's Street, Oxford Street; W. Stewart, South Bridge Street, Edinburgh; and Hodges and M'Arthur, Dublin.

THE WEEKLY

MEDICO-CHIRURGICAL & PHILOSOPHICAL MAGAZINE.

No. II. SATURDAY, FEBRUARY 15, 1823. *Price* 4*d*.

"FLORIFERIS, UT APES, IN SALTIBUS OMNIA LIBANT
OMNIA NOS, ITIDEM, DEPASCIMUR AUREA DICTA."

ON MEDICAL WRITERS, AND BOOK MAKERS.

The following civil questions, we presume may be asked without giving offence to any one; viz.—Ought medical men to write? And when they do write, is it to acquire fame; to reap emolument; or to deceive the vulgar?

The CACOETHES SCRIBENDI, alias Scribblomania, was never more epidemically prevalent, or more at its height than at the present day. The press teems, and the town is inundated with medical books of every shape, size and description, from the ponderous folio, progressively downwards to the petty 48mo; while their equally numerous *authors* are all slyly staring through the portals of hope, looking auspiciously big, some for immortality, others for mammon; though both, not unfrequently, only obtrude themselves on the world, merely, it would seem, to be smothered in the booksellers dust; or, at best, to glide into circulation, leaf after leaf, from the mawkish hands of the tallow-chandler, the butter-merchant, or the oilman. "SIC TRANSIT GLORIA *Libri*." Even in this case, it may be some consolation for unhappy authors to know, especially if they have any knowledge of chemistry; that, notwithstanding the honest drudgery their ill-fated pages are doomed to undergo;—nay, were they even committed to the flames; instead of being lost, they have only assumed new forms, and that they are still, to their *honour and glory*, in existence; though doubtless many of them are invisible.

If our knowledge bore any proportion to the number of books that are published, how wonderfully learned and enlightened we should all be! What an immense sphere of profound science we should embrace! Every day new works are announced, and *thank God*, after all, we are not a whit the less ignorant on that account. Whence then arises, or to what cause may these seemingly palpable contradictions be attributed; that, instead of becoming more wise or enlightened by means of a multiplicity of books, they serve only to obscure what little intellect we may naturally possess, and keep us more in the dark, than, in all probability, we should be, were they not so *gratuitously* showered in among us? Is it that nature is impenetrable? Or that her surface is merely skimmed over? Both are equally true. The sciences, therefore, may, in this respect, be compared to a nose made of wax, which may be handled and twisted in any direction, at the fancy of the possessor; just, in fact, as he may think proper to model, or is capable of giving it a form suitable to his own notions of nose-making.

It is these kinds of forms, differently and infinitely varied, and no new ones, that are continually being offered up to us; like an old coat newly turned, which, to the careless observer, may pass off very well, at a certain distance, for a

first hand article, but which, upon closer examination, is easily detected, from the coarseness of its texture, and the awkward gait it gives the wearer, however well it may be trimmed up and decorated, to deceive the eye. In like manner, the Imagination wanders over old ideas, and works them up or rather turns them into new dresses, without the distinguishing aid of GENIUS—a talent rarely found associated with similar productions of the fancy, but without which, no gaudy pencil can embellish, nor fictitious substitute adorn the fine arts. It may, nevertheless be enquired how far GENIUS itself adds to, and extends the fine arts? We answer, "the journey of a mole." This, in fact, is all, comparatively speaking, the greatest genius, not excepting even a Newton, solely devoted to the science of physic, can work out of the vast and unfathomable field of nature.

Literary lore, then, of this circumscribed description, certainly deserves to live no longer than the FASHIONS which it so much resembles: the public, nevertheless, should be undeceived. Still, it is those very new-fangled forms, fashions and ways of imagining, which, succeeding each other so rapidly and so diversily, seduce and lead the mind astray, by the evanescent charm of novelty which they introduce with them, and the *gout de l' esprit* which, in some instances, they possess.

Is it then, after what has just been observed, requisite that medical men should write? We say medical men, for it is to them in particular, we now address ourselves. Reason answers, —yes! provided they have any new discoveries or experiments to communicate; or even old observations to confirm. Sydenham, Boerhaave and others of equal celebrity, before and after them, would have been but indifferent citizens, and their names would have died with them, instead of being transmitted, as they deservedly are, to after ages, had they barely and passively contented themselves with being useful during their lives; without enlightening the world, with the fruits of their long practice and observation, before they died. Such men live in the grave, and their example is worthy of emulation by every eminent and aspiring practioner, who, nevertheless, may serve his country, before he resigns into the arms of immortality, half a century and upwards, just as the chance of longevity may be in his favor; or, in more christian-like language, as God may think fit to prolong his days for the benefit of mankind. These, are the men that ought to write; their books become lasting monuments of their worth; and, however much succeeding ages may obliterate their pristine merit, they will ever bear the imperishable stamp of the unsophisticated and avowed doctrines of their own time, which nothing but new lights, and the further progress of intellectual improvement and research, can obscure. These, we repeat again, are the good authors; and those the distinguished marks that characterise them from the maniacs of another order.

On the other hand, should medical men have nothing new to communicate beyond what is generally known and understood; should they have nothing new to add to the general stock of knowledge, or to the further illustration of what others have whistled, sung, and said long before them; it would be better truly were they to remain in peaceful oblivion, contented with their lot, than to foist themselves upon the world for the finger of derision to be pointed at their ignorance and imbecility, which had neither been known nor noticed, had they held their tongues: these instead of being styled authors, ought rather to be cognominated "multipliers of books," without object or benefit to any one, not excepting themselves: fit carrion for the literary slugs and caterpillars, ycleped reviewers, who never fail to make a hearty meal, without objecting to the quality, of every thing that comes in their way, previous to their consign-

ment to the chandler's shop, or the dust of the shelf.

But, what rational excuse can be preferred by the man whose little home-spun ambition prompts him to expose his ignorance in his old days, by attempting authorship, after probably having secured to himself an ample competence of the good things of this life, by dint of *booing and scraping*, bustling through the mob, and after having trotted the pavement for a long series of years, to acquire a "local habitation and a name," by *tittle tattling and gossiping* among a variety of other species of professional drudgery and humbuggery. Surely such *authors* as these deserve to split on their own rocks, as a punishment for the folly of having sacrificed their little hard earned reputation, by putting it down with so little scruple, where the odds are so much against the attainment of their object, be what it may. Yet how often is this the case. The vain glory of seeing a name affixed to the title page of a book, is a temptation that requires much prudence and circumspection to resist;—and that book too, as little related to the name it bears as a placard stuck up against a wall is connected with the house or the property it contains. We live in a scribbling age;—to some it is a hobby; to others it is a trade; to some again it is a desultory species of profligacy, idleness, and vanity, and to numbers an unprofitable speculation. Too many of one trade always spoil the market. Well has the poet observed—

"Thus fools do write, and fools will scribble more,
As dogs do piss, where dogs have piss'd before."

This is to serve for a whole volume on the subject.

In proscribing, nevertheless, useless writers on medical subjects, and in thus denouncing them, some grains of allowance ought, notwithstanding, to be made to those skilful abbreviators, who, by an admirable art, [illegible] reduce an infinite number of volumes into one which shall contain the very extract and flower of them all. In the absence of those industrious bees, who build such useful and wonderful hives, enriched with a honey which so many others have had the trouble of collecting, or that chance may have pointed out to themselves, the use of the *goose-quill* may be permitted to those judicious compilers, who evince equal taste and method in the arrangement of their materials. This species of writers may be said to carry the whole artillery of antiquity upon their back; they are the war-horses of the republic of letters; consequently, animals useful to society in particular, and to the state in general.

F.

BIOGRAPHY.

DR. JENNER.

If the memory of persons was to be perpetuated in proportion to their usefulness to society, the humble individuals who saved the life of a fellow mortal would have a niche in the Temple of Fame, while the conquerors whose blood-stained laurels are now the theme of admiration, would be consigned to oblivion, if not to execration. Let others then celebrate the triumphs of the warrior, while we offer the just tribute of applause to Jenner, the great discoverer of vaccine inoculation, one of the greatest blessings that an individual ever conferred upon his fellow creatures.

The Roman who preserved the life of a single citizen was rewarded with a civic crown; and divine honours were paid to Hippocrates for delivering Athens from a dreadful pestilence for a season; what crown does he merit then who preserves the lives of millions? To what honours is he not entitled who exterminates a destructive pestilence for ever, not in a single city or country, but banishes it from the face of the whole earth?

Dr. Edward Jenner, the youngest son of the Rev. Stephen Jenner, M.A. Rector of Rockhampton, and Vicar of Berkeley, was born May 17, 1749. At a very early period of his life the foundation for his great discovery was probably laid. He was a fine ruddy boy, and at eight years of age was, with many others, put under a preparatory process for inoculation with the small-pox, by the late Mr. Holbrow, of Wotton Under-

edge. This preparation lasted six weeks. He was bled, to ascertain whether his blood was fine; was purged repeatedly, till he became emaciated and feeble; was kept on very low diet, small in quantity, and dosed with a diet-drink to sweeten his blood. After this barbarism of human-veterinary practice, he was removed to one of the then usual inoculation stables, and haltered up with others in a terrible state of disease, although none died. By good fortune, the Doctor escaped with a mild exhibition of the disease. After this, he went to Cirencester, to a school, at which he stayed half a year; and upon his return home, at the expiration of that term, he had arrived at the end of the Latin Accidence. At this time he became much attached to natural history; at the age of thirteen he was placed under the care of Messrs. Ludlow of Sudbury, then surgeons of considerable eminence. The mistaken treatment of him, when in the small-pox, brought on a hypochondriacal habit; he could never enjoy sleep, but was constantly haunted by imaginary noises; and a susceptibility too acutely alive to these and sudden jars, remained with him during the whole of his life.

After the usual introduction into the elementary parts of the Materia Medica and surgery, he became house pupil to the celebrated John Hunter, and laboured with him in the formation of that stupendous monument of anatomical and physiological industry and magnificence, the Hunterian Museum. From London, Mr. Jenner returned to Berkeley, and there continued his anatomical and physiological researches. Although offered a partnership with his preceptor, he preferred his native place, and commenced practice at Berkeley, where he soon attained considerable eminence, in consequence of some extraordinary surgical operations which he performed with signal success.

In his researches into natural history, Dr. Jenner discovered a curious fact relative to the cuckoo, which is, that the infant cuckoo, reared from the egg in a sparrow's nest, expelled the young of that bird by placing them upon its shoulder, on a depression which nature gives for the purpose on the back of the unfledged cuckoo, and throwing them out of the nest. Soon after the publication of Dr. Jenner's paper on this subject, in the Transactions of the Royal Society, before whom it was read, he was elected a fellow of that body. He now married Miss Catherine Kingscote. As an instance of his bias to philosophical pursuits, and his love of home, we have an interesting anecdote related by Dr. Lettsom in one of his orations before the London Medical Society: —

'He [Dr. Jenner] happened to dine with a large party at Bath. Something was introduced at the table which required to be warmed by the application of the candle, and doubts were expressed by several persons present, whether the most speedy way would be to keep the flame at a little distance under, or to immerse the substance into it. Jenner desired the candle to be placed near him, and immediately putting his finger into the flame, suffered it to remain some time: next, he put his finger above it, but was obliged to snatch it away immediately. "*This, gentlemen,*" said he, "*is a sufficient test.*" The next day he received a note from General Smith, who had been of the party on the preceding day, and who was, before that time, an utter stranger, offering him an appointment in India, which would ensure him, in the course of two or three years, an annuity of £3000. The offer was referred to his brother, and our Jenner, from his attachment to him, declined it.'

Dr. Jenner made many important scientific discoveries, but that of vaccination surpasses them all. His inquiry into the nature of the cow-pox commenced about the year 1776. His attention to this singular disease was first excited by observing, that among those whom he inoculated for the small-pox, many were insusceptible of that disorder. These persons he was informed had undergone the casual cow-pox, which had been known from time immemorial in the dairies, where a vague opinion prevailed that it was a preventive of the small-pox.

The attention which Dr. Jenner devoted to investigate this subject was long and ardent, and his experiments various; at length the idea occurred to him, that it might be practicable to propagate the cow-pox by inoculation, after the manner of the small-pox: first from the cow, and then from one human subject to another. The first case in which he put his theory to the test inspired him with confidence; and a regular series of experiments, which he afterwards instituted for that purpose, were crowned with success. Several persons were successively inoculated with vaccine matter, and afterwards exposed in a variety of ways to the infection of the small-pox, which they all resisted.

Envy, which attends all great discoveries, assailed Dr. Jenner: his discovery was first depreciated and then decried; truth, however, ultimately prevailed; vaccination obtained a complete triumph, and the foes of Jenner and of humanity were on this occasion covered with confusion.

In the month of July, 1796, Mr. Cline successfully introduced vaccination into the metropolis. The reports of some medical gentlemen against it, together with the falsehoods that were industriously propagated, had nearly caused vaccination to be abandoned; a little perseverance and more favourable reports, however, soon proved its value; and all Europe bore testimony in its favour.

Vaccination was soon introduced into the

army and navy, and honours heaped on the head of its great founder. The physicians and surgeons of the fleet presented Dr. Jenner with a gold medal and a suitable address. The medal represents Apollo, the god of physic, introducing a seaman recovered from vaccine inoculation to Britannia; who, in return extends a civic crown, on which is inscribed—JENNER. The motto is peculiarly happy—ALBA NAUTIS STELLA REFULSIT.

On the reverse is an anchor, above GEORGIO TERTIO REGE.; below SPENCER DUCE; expressing the reign and the naval administration of the sovereign and peer under whose auspices this valuable improvement of the healing art was introduced into the navy of Great Britain.

The Empress Dowager Mary of Russia, and several foreign potentates, now sent gratulatory addresses to Dr. Jenner on his discovery, which has been rapidly gaining ground in every quarter of the globe. A few instances of this are worthy of being recorded.

When Dr. Wickham was made prisoner in France, our philosopher was applied to as the fittest person for addressing to Bonaparte a petition soliciting that physician's liberation. This was at the time of Napoleon's greatest animosity to this country. It happened thus: the emperor was in his carriage, and the horses were being changed. The petition was then presented to him. He exclaimed, 'Away! away!' The Empress Josephine, who accompanied him, said, 'But, emperor, do you see whom this comes from? Jenner.' He changed his tone of voice that instant, and said, 'What that man asks is not to be refused;' and the petition was immediately granted. The ex-emperor also liberated many others, from time to time, at the request of Dr. Jenner, even whole families. Indeed, he never refused any request made by Dr. Jenner, who, of course, observed proper delicacy in not applying too often.

When the foreign potentates arrived in this country in 1814, they all expressed a wish to see Dr. Jenner; he was first introduced to the Grand Duchess of Oldenburgh, when the conversation continued upon philosophical subjects, and her imperial highness astonished the doctor by the extent of her information. Dr. Jenner requested her imperial highness, when she wrote to her august mother, to have the goodness to say that he had a grateful remembrance of the kind attention which she shewed him. '*When* I write?' she replied, 'I will write this very evening!'—At parting she said, 'Dr. Jenner, you must see the emperor my brother, who is expected here soon.' Dr. Jenner bowed acquiescence and withdrew.

The emperor arrived, and the promised interview took place in the most gracious form. The doctor was ushered into a room, which soon after his imperial majesty entered alone He pronounced the words 'Dr. Jenner!' (which was returned with a respectful bow), and then advanced and touched his right shoulder. Alexander shortly commenced a discourse upon the astonishing effects of vaccination in Russia; and Dr. Jenner had the pleasure of hearing him declare that the vaccine had nearly subdued small-pox throughout that country. Dr. Jenner then told the emperor that he had the highest gratification at hearing such an important fact from his majesty himself. Dr. Jenner then presented the monarch with a volume of his own works upon the subject; and added, 'that in whatever country vaccination was conducted in a similar way to that which his majesty had commanded in the Russian empire, the small-pox must necessarily become extinct.' The emperor then made some observations which were highly complimentary to Dr. Jenner.

In a few days afterwards Count Orloff, with whom he had been long acquainted, from attendance on his countess, waited on Dr. Jenner, and asked him if a Russian order would be acceptable to him, should his majesty be graciously pleased to confer it. Dr. Jenner replied, that he thought this exclusively belonged to men of perfect independence. The count expressed his surprise at his not possessing a pecuniary independence. Dr. Jenner answered, that he possessed a village fortune, though not what came under the general acceptation of the term independence.

By appointment Dr. Jenner waited on the King of Prussia. The doctor came rather late, and the king was in haste to go to church. His majesty, however, gave him a very polite reception, and apologized for being under the necessity of going to church; but made, as did the other sovereigns, a general acknowledgment of the obligations of the world to Dr. Jenner. Either a child of this king, or of the Emperor of Austria, was the first royal child inoculated in Europe. After the king was gone, the crown prince, and many others of the illustrious foreigners honoured Dr. Jenner with particular notice, and gave him a pressing invitation to Berlin. The crown prince is known to be a young man of very brilliant pretensions.

Dr. Jenner's next presentation was to Blucher. He was very polite, and rather facetious. Before the general entered the room, a Turkish tobacco-pipe (a Turkey bowl with an alder stick) was brought in by a servant, upon a velvet cushion. An exchange of compliments took place.

The next interview was with Platoff. To the astonishment of Dr. Jenner, who was accompanied by Dr. Hamel (a physician born on the banks of the Don, and acquainted with the Cossack language), the count proved to be quite a polished gentleman, had a knowledge of vaccination and prac-

tised it. He said, 'Sir, you have extinguished the most pestilential disorder that ever appeared on the banks of the Don.'

After this interview Dr. Jenner returned to Cheltenham, where he had the misfortune to lose his excellent lady. In a short time after this event he removed to Berkeley, where he continued in elegant retirement, until his death, which took place rather suddenly, on Sunday, the 26th last, in the 74th year of his age.

We need not say that science has lost in the death of Dr. Jenner, a great man, but nature permitted him to complete his grand discovery, and to render his measure of service to the world—a service which will benefit all succeeding ages, who will bless the name of JENNER.

PHYSIOLOGICAL OBSERVATIONS.

Analysis of Flourens' Memoir entitled Physical Researches on the properties and functions of the Nervous System.

This interesting Memoir is composed of two parts; the first has for its object the determination of the properties of the nervous system; the second, the determination of the part which the different portions of this system performs in the voluntary movements.

According to M. Flourens there are two properties essentially distinct in the nervous system: the one to excite muscular contraction; the other to perceive impressions. The object was to determine experimentally what parts of this system serve exclusively for sensation; and what, on the contrary, serve exclusively for contraction. It is evident, that the trial of each part could alone ascertain its property. M. Flourens has therefore subjected to trial, separately, and in turn, the nerves, the spinal marrow, the medulla oblingata, the tubercula quadregemina, the cerebellum and the cerebral lobes. From these experiments, thus chalked out, it follows:—1st.; That the nerves, the spinal marrow, and the tubercula quadrigemina, are capable of exciting muscular contractions. 2nd. That the central lobes, and the cerebellum are not capable of exciting them. Haller and Zinn had formerly noted the impassibility (insensibility) of the upper layers of the cerebral lobes; Lorry, that of the corpus callosum; M. Flourens, has for the first time, observed this insensibility in the whole of these lobes, in the cerebellum; and has been the first to fix the limit at the tubercula quadregemena.

The irritation of a nerve separated from the nervous centres by section or ligature, is confined to the excitement of abrupt and partial contractions in the muscles, to which this nerve is distributed. The nerve, therefore, excites properly only contractions.

The spinal marrow being cut successively above the posterior enlargement, above the anterior, and near to the occipit: at first the animal lost the use of its hind paws, then of its fore paws, and next of the trunk; but in all these cases, the whole of the parts, the hind and fore paws, as well as the trunk, preserve their collective movements; *(mouvemens d' ensemble.)*

We ought to add that these movements take place only in consequence of external irritations. What has disappeared, is first; the co-ordination (consentaneity) of the movements in leaping, flying, walking, standing, catching, &c.; and secondly, the volition of these movements. What remain, are the contractions, and the connection of these contractions, in associated movements. The spinal marrow, then, properly ties the muscular contractions, in associations, (mouvemens d'ensemble) as to volition and the co-ordination of these movements that reside elsewhere.

The irritation of the spinal marrow constantly occasions violent convulsions; its destruction speedily brings on death; but this last effect depends on its action on the involuntary movements. Constantly, the abstraction of one of the tubercula quadrigemina, causes the sight of the opposite eye to be lost. The irritation of a tuberculum determines contraction in the opposite iris; its complete removal abo-

lishes the contractions entirely. In the tubercula, therefore, the primary principle of the action of the iris, and of the retina resides.

In proportion as we cut off the cerebellum, by successive layers, the animal loses gradually the faculty of flying or running; then that of walking, and finally that of standing upright.

A single cerebral lobe being removed the animal loses immediately the sight of the opposite eye; but the contractility of the iris of this eye continues, notwithstanding, the animal at first experiences a weakness much more marked on the opposite side of the body. In other respects, it goes on as usual. The two lobes being removed, there is no longer any vestige of volition, or of memory, or of any perception: memory, volition, perception, reside then in the cerebral lobes.

Experiment 1st.—M. Flourens removed the cerebellum in successive layers from a pigeon; at the taking away of the first slice, the animal experienced but little weakness and hesitations in its motions. At the middle layers, its walk became unsteady and agitated, altogether like that of a drunken person; soon it could not walk without the assistance of its wings. The sections being continued, the animal lost altogether the faculty of walking; its feet were no longer able to support it, and it had to sustain itself upon its tail and wings; it often attempted to walk or fly, but always without success. If it was pushed forward, it tumbled over its head; if backwards, it rolled on its tail. The sections were carried farther; the animal then lost the faculty of keeping itself up upon its wings and tail: it tumbled continually, without being able to stop in any fixed position, and it finally rested flat on its back or belly. In other respects, it saw and heard very well; its air was lively, its head erect, and spirited.

Experiment 2nd.—M. Flourens removed from a pigeon the right cerebral lobe; the animal lost instantly the sight of the left eye; but the contractility of the iris of that eye, remained unchanged. There was also a marked feebleness in the right side of its body. With the exception of these two circumstances, the animal was well; it sustained itself, walked, ran, flew, saw with the other eye, understood, wished, felt as usual. The other lobe being removed, the sight of both eyes was instantly lost, but not the contractility of the iris. There was at first a very distinct general debility. Otherwise, the animal held itself perfectly upright on its feet; and in whatever position they put it, it maintained its equilibrium. It walked, when pushed: it flew when tossed in the air: but left to itself, it remained plunged as it were in a continual stupor. It never moved except in proportion as it was irritated; it gave no sign of volition. Memory, vision, hearing, will, all its perceptions, were extinguished. There is none of his numerous experiments which M. Flourens has not repeated on each of the four classes of vertebrated animals; and he has always indicated the shades of greater or less depth, which characterise these classes.

Since the nervous parts, from which sensation is derived, are distinct from the parts from which movement flows, we may conceive the possibility of determining at pleasure distinct palsies effecting and motion. The most striking example of this real insulation, is that of the wonderful coincidence of the loss of vision, with the preservation of the contractility of the iris. There are two means of destroying vision, without departing from the cerebral mass; one, the removal of the central lobes, which causes the loss of sensation in the eyes; another, the removal of the tubercula quadrigemina, which occasions the loss of motion. Finally, the cerebral lobes being removed, the animal cannot commence any motion; but, if a motion be begun, it continues. It does not walk spontaneously; but it walks if pushed. It is no longer vo-

lition that determines its movements; but an external irritation may supply its absence, and determine them like volition.

HEADS OF LECTURES *on Ulcers, with Remarks and Observations thereon, by* MR. JOHN ABERNETHY, SIR ASTLEY COOPER, SIR E. HOME; *&c. &c. &c.*

(Continued from Page 6.)

The treatment most generally pursued consists in the application of steam or vapour from warm water, with the addition of a small quantity of vinegar or spirits added to it; fomentations of poppy heads, hemlock, or of opium, are of use. The recent hemlock is best, if it can be procured, combined with the poppy heads, are frequently employed with good effect. A decoction of wormwood and chamomile flowers, is recommended by Sir Everard Home. Poultices made of marshmallows or lintseed, are useful, but the carrot poultice seems to agree as well as either; but sometimes it is preferred to mix linseed with it, in the proportion of one part of the latter to five of the former. These applications are, in some cases, very advantageously changed: a change of air also, even to one less salubrious, is often attended with good effects, in improving the health. A heavy poultice ought never be laid upon an ulcer; the ulcer on the contrary should lie upon it. Sir Everard also remarks, that powdered charcoal has been found useful. Ointments are not proper applications; and when warmth has been found prejudical, cream has been useful. Bandages are to be avoided.

INDOLENT ULCERS are the very reverse of the former. The edges of the surrounding skin of these are thick, prominent, smooth, and rounded; the surface of the granulations smooth and glossy; the pus thin and watery; imperfectly formed, and blended with coagulable lymph in flakes, not easily separated from the surface of the sore, the bottom of which is level or nearly so. Sir Everard again remarks on this subject, that this general aspect conveys an idea of the portion of skin and parts underneath, having been for some time removed, without the exposed surface having taken on a new action to fill up the cavity. The principal part of ulcers seen in the hospitals are of this kind, though, in appearance, they vary a little from the above characteristic marks. A healthy, weak, or irritable ulcer, degenerates, unless healed in a certain time, into an indolent one; there are, however, some exceptions to be met with in this case; as there are irritable ulcers that never change their nature. Indolent sores form unhealthy granulations, which again become suddenly absorbed; an event promoted by change of weather, anxiety, fatigue, &c.

TREATMENT.—Mr. Abernethy has very judiciously observed, that, whoever can apply a bandage most perfectly and securely round a limb, will cure these ulcers best. The profession is under particular obligations to Mr. Baynton, of Bristol, for his excellent treatise on this subject. The treatment of the indolent ulcer, more especially, consists in strapping the wound with adhesive plaister, and applying a bandage from the foot to the knee, should the ulcers be situated between these points; in order to give due support to the circulation. Adhesive plaister is to be applied round the limb, covering the sore both above and below; approximating, at the same time, the edges of the ulcer as near as possible; soft compresses are then to be laid on, and the roller applied. Excess of inflammation is to be moderated by moistening the bandages with spring water; or, if considerable, with a very weak solution of the acetate of lead: water, however, will generally be found to answer the purpose; and there is no necessity to confine the patient, who may be allowed moderate exercise. It may be proper, at the commencement, to ap-

ply poultices till the granulations arise to some height, when it becomes necessary to stimulate them with a solution of lunar caustic, or diluted nitrous acid, giving the due support to the limb before alluded to by means of the roller; but the preceding plan is to be preferred, as it will be found to be more uniformly successful.

(To be continued.)

HOSPITAL REPORTS.

No operation of any importance has come to our knowledge since our last.

Mr. Ashton Key is about to resign his demonstratorship, (anatomy) in consequence of his numerous professional engagements.

It is understood that BRANSBY COOPER, Esq. will be his successor.

RETROSPECTIVE SURGERY.

The following dissertation on the inutility of amputation, where limbs might otherwise be spared, contains so many excellent practical observations, and have since been so frequently and eminently acknowledged and sustained, that we cannot resist, notwithstanding the remoteness of its first publication, giving it a place in our Magazine. It was written originally in Latin by Mr. Bilguer, Surgeon General to the Armies of the King of Prussia, (than whom, no one has afforded a more ample field *for the acquisition of practical surgical knowledge) translated first into French, with Notes, by Dr. Tissot, Physician of Lausanne, and afterwards translated and published in English.*

M. BILGUER's first position is, "that the cases in which amputation is necessary, are much less frequent than has hitherto been supposed."

This position, he says, is founded on his own observations in the military hospitals, during the late bloody war, where he remarked, that in a great number of cases in which amputation was judged necessary by the physicians of the army, it did not answer the end. He had also under his immediate care a great number of patients, whose limbs had been shot off, and the stumps left shattered in such a manner, that a fresh amputation was universally thought necessary, but whom he cured without that dreadful expedient: he also cured without amputation, many patients whose limbs were not entirely separated, but so much detached, contused, and shattered, that the ablest surgeons thought it indispensibly necessary to take them wholly off.

M. Bilguer reduces the cases in which amputation has been thought necessary, to six.

1. A mortification which spreads till it reaches the bone.

2. A limb so hurt, that mortification is highly probable.

3. A violent contusion of the flesh, which at the same time has shattered the bones.

4. Wounds of the larger blood vessels of the limb, when recourse is had to amputation, as the only means of stopping the hæmorrhage, or through an apprehension that the limbs should perish for want of nourishment.

5. An incurable caries of the bones.

6. A cancer, or tumour in danger of becoming such.

He lays down his method of cure in each of these cases separately.

1. In a mortification, he begins by making incisions on the part affected, to procure a discharge of the corrupted matter, and assist the action of the medicines. He makes these incisions of a considerable length, not only on the mortified parts, but those adjacent, and as near to each other as the large trunks of the blood vessels and branches of nerves will allow, not more than an inch distant from each other, and always to the quick. If the bone be affected, he cuts through the periosteum, and lays it bare. These incisions are in the direction of the fibres of the muscle on which they are cut; but he observes, that, when the gastrocnemii, the glutei, or deltoid muscles have been wounded by a ball, they must be cut transversely, otherwise convulsions, particularly the spasmus cynicus, will

ensue; several of the aponeuroses, especially that of the biceps, ought likewise to be cut transversely; the tendons also must be cut in the same direction. If the wound or ailment happen to be near the articulations, he also cuts through the ligaments. These incisions must be longest where the sore has spread the widest, and deeper in the middle than at the extremities; the number may be from three to eight, as the case may require.

After these incisions, the mortified parts must be separated from the sound by a bistoury, as one muscle is divided from another in dissections; but parts, not totally corrupted, may be spared; for, after the removal of what is totally dead, they will recover; great care must be taken in removing the gangrened parts that lie near large vessels, that such vessels are not wounded; and, it is better to leave a small part of the mortified flesh, that adheres to them, behind; and trust to its separation by the dressings, than to risk breaking them; and, in general, the incisions should be made with as little effusion of blood as possible. If the neighbouring parts are tainted, the corrupted humour must be squeezed out by gentle compression, and wiped off with a soft linen rag. Afterwards, proper external applications must be used.

The bone, whether the periosteum be sound or destroyed, must be dressed with the following medicine:—

Frankincense, mastich, sarcocolla, and myrrh, finely pounded; true balsam of Peru, and genuine essential oil of cloves, of each equal parts; of balsam of fioraventi as much as may, in mixing all the ingredients over a very gentle fire, form a thin liniment.

This must be used warm, and poured plentifully into the wounds, so that the bone may be well moistened with it; some dry lint must then be laid on, and the fleshy parts dressed by sprinkling upon this lint a powder composed of "an ounce of myrrh finely pounded, half an ounce of sal ammoniac, camphor and nitre, each a drachm:" after the first layer of lint is thus covered, fresh lint must be applied, and sprinked with the powder, till the wound is quite filled up with alternate layers of the lint and powder.

If the bone is not affected, or the periosteum laid bare, the liniment may be omitted, and the lint and powder only used. Slight scarifications should also be made upon the neighbouring parts, sprinkling them with the powder; and all the sores should be afterwards embrocated with oil of turpentine, and the whole bandaged up with plain linen cloth, which must be kept moistened night and day with warm fomentations.

Heister has collected a sufficient number of these fomentations, from which a surgeon will easily select the most proper for the case of his patient: that consisting of a pint of lime-water, three ounces of camphorated spirit of wine, and an ounce, or half an ounce of sal ammoniac, is useful in mortifications which proceed from high inflammation; so is that made with soap, salt of tartar, and oil of turpentine, dissolved in lime-water.

When the mortification proceeds from a mere defect of the vital motions, as in dropsical and aged persons, the following fomentations are more proper.

1. Take of water germander, wormwood, southernwood, and rue, of each two handfuls; camomile flowers, one handful; boil them together; and to two pints of the strained liquor, add four ounces of treacle spirit, two ounces of venice soap, and half an ounce, or even an ounce of sal gem.

2. Take of water germander, wormwood, feverfew, of each two handfuls; of mint and southernwood, of each a handful: boil them together in oxycrate, so as to have four pints of the strained liquor, to which may be added half an ounce of sal gem, and afterwards from two to four ounces of treacle spirit.

3. Take of martial ball two ounces,

sal ammoniac one ounce; dissolve them in about eight pints of spring water, and add two pints of rectified spirit of wine.

4. Take of crude alum, and white vitriol, each two ounces and two drams; lytharge of silver and myrrh, each an ounce; Aleppo galls, two ounces; juniper and bay berries, each an ounce; savin and rue, each two handfulls; oak leaves, a handful and a half; verdegris, half an ounce; camphor, two drams; calamine, six drams. After having mixed and reduced all these ingredients to powder, let two ounces of the composition be boiled with four pints of water, or with two of water and two of vinegar.

The following embrocations applied to parts already mortified, will stop the further progress of the mortification; where it is just beginning they will prevent it, and will also help nature to separate the dead parts from the sound.

1. Spirit of wine, three ounces; myrrh and aloes powdered, of each half an ounce; Ægyptian ointment, three drams.

2. Vinous decoction of scordium, twelve ounces; vinegar of rue and of roses, of each four ounces; spirit of treacle, three ounces; and one ounce of sal ammoniac.

3. Lime water, four pints; treacle spirit, or that of feverfew, two pints; white wine vinegar, one pint; elixir proprietatis, six ounces: Ægyptian ointment, two ounces.

4. Decoction of elder flowers, six ounces; wine, eight ounces; vinegar, camphoroted spirit of wine, treacle spirit, or that of feverfew, each two ounces; spirits of salt, two drams.

Lastly, in order to soften the parts, separate the sloughs, and promote suppuration, the following application may be used.

Water germander, two handfuls; mallows and marshmallows, each a handful; flower of linseed, three ounces; Venice soap and sal ammoniac, of each two ounces; linseed oil, an ounce. Let these ingredients be boiled together, in vinegar and water, to the consistence of a poultice.

It may be in general observed with regard to fomentations, that such as are emollient are serviceable when hard dry crusts prevent a discharge; those which abound with acid, when there is a considerable degree of putrefaction; and, lastly, those which are spirituous, saline or strengthening, are most proper when swellings are flabby, and the body abounds with aqueous humours.

The diligent use of these fomentations, will in twelve hours, alter the condition of gangrened wounds for the better; then the lint and powder may be removed, all the detached pieces of mortified flesh extracted, and the dressings renewed every twelve hours; at the third or fourth dressings, the wounds will discharge matter of a favorable aspect, when it will be necessary to give the bark internally.

The bark may be given by itself in powder, or made into an electuary with any of the cordial syrups; if it purges in substance, it must be given in the infusion or extract. But if the fever be strong, the heat considerable, and the patient thirsty, the bark will be of no service, but recourse must be had to temperants.

If the bark is given, it may be in doses of half a drachm or two scruples, every hour at first, afterwards every two hours, and at length, once in every three or four hours: a few drops of spirit of sea salt, or dulcified spirit of vitriol, or a few grains of alum or catechu may be added to every dose; and if the patient be very weak, a small glass of some acid wine. His drink should be water and vinegar, weak veal and chicken broth, and gruels of barley or oatmeal, acidulated with vinegar, or lemon juice.

In this stage, the dressings already described, being supposed to have procured a discharge of matter, the vulnerary powder and oil of turpentine must be laid aside; but the suppuration must still be promoted, sometimes

to the eighth day, by dressing with the following digestive ointments. Boil half a pint of oil olive, and an ounce of red saunders together, till the oil acquires a deep red colour; when it is strained, add a pound of yellow wax, and a pound and a half of turpentine; when the whole is mixed and melted together over a gentle fire, a little balsam of Peru may be added, and it may be quickened with a little essence of myrrh. Suppuration must also be assisted by keeping the parts constantly covered with emolient fomentations, and by avoiding to cleanse the wound too much, either by compression or wiping, and removing the corrupted parts without effusion of blood: regard must also be had to the bones; after the most careful examination, in which dilation is sometimes necessary, all the splinters and carious parts, that can be removed without violence, must be extracted, and they must then be covered with the balsam for the bones, of frankinsence, mastick, &c. as before directed.

All these dressings should be finished as expeditiously as possible, to avoid cold; the room should be warm, and if necessary, a few burning coals held near the part which is dressed.

After these directions, M. Bilguer argues thus, with respect to mortifications. They are the effect either of some internal morbid cause, or external injury; if of an internal cause, amputation can do no good while such cause remains, and if that can be removed, a cure may be effected without amputation; if, of an external accident, and they continue to spread, there must be a fever, and general inflammation, and for that reason amputation can only accelerate the patients death * while the mortification therefore is gaining ground, the method above proposed should be pursued: when the progress is stopped, we should consider whether the limb can be saved; and nothing but the total rottenness of the bone is a proof that it cannot; for the periosteum may be cut and torn, without giving pain in a sound state, as Haller has demonstrated. If the bone is totally rotten, amputation should be performed, not by cutting through the quick, but by lopping off the gangrened useless mass very near it. After providing against an hæmorrage of the larger vessels by a proper ligature, stopping the progress of the gangrene must be then attempted by internal medicines, and suitable dressings; the patients strength should be supported by a proper regimen, and if it increases, a separation of the soft parts that are mortified, will certainly ensue; after which it will be easy to saw off the little stump of the dead bone that was left, and the wound may be cicatrised by epulotic applications, and such as have been just recommended for bones when laid bare.

(To be concluded in our next.)

* Our own countryman Mr. Sharpe, who has been long an honour to his profession, has irrefragably proved the impropriety of operating on the sound part, while the mortification is gaining ground.

ON HYDROPHOBIA.

Sometime back the following account appeared in the newspapers, since which it has been made public through various channels; and, thinking as we do that it cannot be too generally known, we give it a place in our Magazine.

In 1813, when Mr. Macochetti (an operator in the hospital at Moscow,) was in the Ukeraine, in one day fifteen persons applied to him for cure, having been bitten by a mad dog. Whilst he was preparing the remedies, a deputation of several old men made its appearance, to request him to allow a peasant to treat them, a man who had for some years past enjoyed a great reputation for the prevention of Hydrophobia, and of whose success Dr. Marochetti had heard much. He consented to their request, under these

conditions :—first, that he (Mr. Marochetti) should be present at every thing done by the peasant: secondly, in order that he might be fully convinced the dog was really mad, he, Mr. M. should select one of the patients, who should only be treated according to the medical course usually held in estimation. A girl of six years old was chosen for this purpose.

The patient gave to his fourteen patients "Decoct" of the "summit" and "Flor. Genistæ luteæ Tinctoriæ" (about a pound and a half daily,) and examined twice a day under the tongues where, as he stated, small knots, containing the poison of the madness, must form themselves.

As soon as these small knots actually appeared, which Mr. Marochetti himself saw, they were opened, and cauterised with a red hot needle, after which the patient gargled with the decoction of the "Genista." The result of this treatment was, that all of them, (of whom only two, the last bitten, did not shew these knots) were dismissed cured at the end of six weeks, during which time they drank this decoction. But, the little girl, who had been treated according to the usual methods, was seized with hydrophobic accidents on the seventh day, and was dead in eight hours after they first took place. The persons dismissed were seen three years afterwards by Mr. Marochetti, and they were all sound and well.

Five years after this circumstance (in 1818,) Mr. Marochetti had a new opportunity afforded him in Podolia of confirming this important discovery. The treatment of twenty-six persons, who had been bitten by a mad dog, was confided to him; nine were men, eleven women, and six children. He gave them at once a decoction of the "genista," and a diligent examination of their tongues gave the following result; five men, all the women, and three children, had the small knots already mentioned; those most bitten, on the third day, others on the fifth, seventh, and ninth; and one woman who had been bitten but very superficially on the leg, only on the twenty first day. The other seven also, who shewed no small knots, drank the "Decoct. Genistæ," six weeks, and all the patients recovered.

In consequence of these observations, Mr. Marochetti believes, that the hydrophobic poison, after remaining a short time in the wound, fixes itself for a certain time under the tongue, at the openings of the ducts of the "submaxillary glands," which are at each side of the tongue string, and there forms these small knots, in which a fluctuating fluid may be felt with the point of a probe, which is the hydrophobic poison. The usual time of their appearance seems to be within the third and ninth day after the bite; and if they are not opened within the first twenty-four hours after their formation, the poison is re-absorbed into the body, and the patient is lost beyond all power of cure. For this reason Mr. Marochetti recommends that such patients should be examined under the tongue immediately, which should be continued for six weeks, during which time they should take daily one pound and a half of the "Decoct. Genistæ, (or four times a day the powder, one drachm for a dose.) If the knots do not appear in this time, no madness is to be apprehended; but, as soon as they appear, they should be opened with a lancet, and then cauterized; and the patient should gargle assiduously with the above mentioned decoction.

Since the above statement, which first appeared in the Berlin State Gazette, an official report made to the Prussian government, and quoted in a subsequent number of that newspaper, represents that knots similar to these described by Mr. Marochetti were found under the tongue of a mad dog in Westphalia last spring.

Medical men, no doubt will know how to avail themselves of this communication, which cannot be too widely diffued, when-

ever a well marked and unequivocal case of Hydrophobia may come under their treatment; but, if we may place a reliance on the following observations, which were made by an eminent lecturer at the west end of the town, a few days ago, in the course of a Lecture on Hydrophobia, little dependance is to be placed upon medicaments of any description in combatting the gigantic malady, which in all likelihood is doomed to be among the approbia medicorum.

Symptoms of a Dog being mad.

In the commencement, the animal strays from home, becomes irritable, bites at every thing before him; in the early stage not afraid to drink, but unable to swallow any fluid; the appetite is depraved, the stomach found crammed with chaff and straw, the lower jaw hanging down, and the saliva dribbling from the mouth; the stomach and gullet much inflamed, the mucous membrane of the former covered with black patches. So much for the symptoms in animals, which it is to be remarked, are always more distinctly marked than in man.

In Jamaica, the disease did not exist formerly, but now it does. All warm-blooded animals were subject to it, but it had not been observed in cold-blooded animals. The disease never occurred spontaneously, but was always communicated by inolcuation. Although the disease was invariably fatal in the human race, it sometimes appeared to be cured in dogs. A dog bit a man; the man died, and the dog got well. The most common period of the disease shewing itself, was from twenty to forty days after the bite.

In the Philosophical Transactions a case is mentioned of a man attacked with hydrophobia nineteen months after the bite. In 131 cases, one was attacked eleven days after the bite, three in eighteen days, sixty-three in the first and second month, and twenty-three in three months after. After the fourth month there is very little danger of the disease appearing. The wound made by a mad dog heals like any other wound, but considerable pain extends from the wound along the course of the nerve, and not of the absorbents, which are never affected.

A gentleman kept a pack of hounds; he found, notwithstanding great precaution, that his dogs frequently contracted hydrophobia. He succeeded at length in completely securing his kennel from this disease, by making every new dog he admitted, previously perform quarantine. The common symptoms of hydrophobia in man are, in the beginning, dejection of spirits, increasing from melancholy to fury, spasm of the muscles, of the throat and chest, dread of liquids, abhorrence of the name and sight of water. It is to be remarked, that very many persons, bit by an animal, have been so alarmed as to die, (not of hydrophobia) but with similar symptoms, occasioned by fear preying on the imagination. The great Mr. Hunter nearly fell a victim to this fear.

In hydrophobia, unfortunately, the preventative might be spoken of, but not the cure, notwithstanding all the myriads of remedies proposed; notwithstanding what has been lately said of the poison not being in the saliva, but in little black pustules under the tongue, which might be extirpated, he was obliged to come to the melancholy conclusion, that no remedy was known for hydrophobia; but, that before the symptoms appeared, the disease might be prevented, by extirpating the bitten part, was certain, and that it should be done at any period, from the wound being made till the symptoms appeared.

MELANGE.

Method of colouring Alum Chrystals.

In making these chrystals, the colouring should be added to the solution of alum, in proportion to the shade which it is desired to produce.

Coke, with a piece of lead, in order to make it sink in the solution, is the best substance for a nucleus; or if a smooth surface be used, it will be necessary to wind it round with cotton or worsted, otherwise no chrystals will adhere to it.

Yellow. Muriate of iron.

Blue. Solution of indigo in sulphuric acid.

Pale Blue. Equal parts of alum and blue vitriol.

New Electro-Magnetic experiments.

The following is a very curious and simple electro-magnetic experiment made by Doctor Sebeck of Berlin.

Take a bar of antimony, about eight inches long, and half an inch thick; connect its extremities by twisting a piece of brass wire round them, so as to form a loop, each end of the bar having several coils of the wire. If one of the extremities be heated for a short time with a spirit lamp, Electro-magnetic Phenomena may be exhibited in every part of it. *Ann. Phil.* iv. 318.

Variation of Thermometers.

M. Flaguergues, in a letter to M. Pictel, points out an effect in certain thermometers, consisting of a gradical elevation of the freezing point of ice. It takes place with those mercurial thermometers, which, being hermetically sealed, have a perfect vacuum above the mercury. In some cases this elevation has risen to nine of a degree, and has gone on encreasing for years together. In examining into the cause of this effect, M. Flaguergues soon observed that it did not take place with mercurial thermometers open at the top, or with alcohol thermometers; and he was led to attribute it to the constant pressure of the atmosphere on the ball of the instrument. He thinks the glass gives way by degrees to this pressure, just as an elastic spring will do under a constant force, and this gradually produces the effect observed. M. Flaguergues thinks, therefore, it would be better to make mercurial thermometers with open terminations, introducing a small plug of cotton to keep the dust out, or in some cases even closing the aperture by some elastic substances as caoutchouc, &c. *Bibliothèque Universelle*, xx. 117.

Mathematical Prize Question.

The following has been proposed by the Mathematical Class of the Royal Academy of Prussia. "To give a complete mathematical theory of the luminous or coloured circles which form round the sun and moon, and such a one as will equally agree with the results of observations, and with the known properties of light and the atmosphere."

This question was proposed for 1822, but it extended to 1824. The possible influence of the reflection, and polarization of light is to be considered. Memoirs are to be sent in before the end of March, 1824. The prize is thirty ducats.

Boerhaave once observed; that it could have been wished the Peruvian bark had never been known; "it has killed" says he, "more people than all the armies of Louis the Fourteenth." His hatred, however, did not arise from any prejudice he entertained against the virtue and use of this drug: but from the ignorance of physicians, who did not know how to prescribe it with discretion sufficient to produce the salutary advantages that are known to attend its judicious administration. A little national prejudice, no doubt, came in for a share of this antipathy. It is reasoning wrong to condemn a good thing because a bad use is made of it:—his argument was retorted upon the physicians; he felt the ridicule of it, and laughed heartily; which was the best reply this great man could have made. *Aliquando bonus domitat Homerus.*

Limitation of Emetus.

Dr. Sutton, of Greenwich, has written a short paper in the November Number of the Medical Repository, to shew that where we wish to limit the operation of Emetics to the Stomach, and prevent their action on the bowels, we should add five or six drops of Laudanum to the Emetic draught, which, in his experienee, has answered the purpose in quotation.

Electrical Effect.

The following effect is attributed by Mr. Fox, who observed it, to Electricity.—A piece of iron pyrites was fastened with a piece of brass wire in a mop-house, the mop being damp. On the following day, the wire was found broken, and excessively brittle, and in those parts in contact with the pyrites much corroded. On one occasion, after the brass wire had been fastened once or twice round a piece of iron pyrites, and had remained for some time enveloped in damp linen, the constituents of the brass wire were separated, and it was converted into copper wire coated with zinc. Ann. Phil. iv. 447.

WORKS PREPARING FOR THE PRESS.

Translating from the French, the 2nd vol. of Majendie's Elementary Summary of Physiology, with copious notes from the Physiological Journal of the same author.

"*To recommend this excellent work more than we have already done would be superfluous.*"—Annals of Medicine and Surgery, &c.

JUST PUBLISHED.

Memoirs of the Life and Writings of John Gordon, M. D. F. R. S. E.; late Lecturer on Anatomy and Physiology in Edinburgh. By Daniel Ellis, F. R. S. E.

PARTNERSHIPS DISSOLVED.

J. and W. Proud, Bridgenorth, Shropshire, Surgeons.

J. and F. T. Atkins, Chemists, Deptford.

J. Racster and W. Woodward, Pershore, Worcester, Surgeons.

DIVIDENDS.

March 1st. J. H. Tucker, Chemist, Jermyn Street, St. James's.

March 3. E. G. Port, Rugely, Staffordshire, Chemist.

BIRTHS.

At Florence, on the 28th January last, the Lady of Dr. Seymour of a Son.

OBITUARY.

At Nagpore, on the seventh instant, aged 29, John Gray, Esq. in the medical service of the Bengal establishment, and attached to the 2nd battalion 22nd regiment of Native Infantry. The death of Dr. Gray is ascribed to a pulmonic affection, aggravated in consequence of military service, during a long and fatiguing march from Cuttack to Hussingabad, in the hot season of 1821. In society, the mild and amiable disposition, and the accomplished and gentlemanly manner of Dr. Gray, were on all occasions conspicuous. Among the literati, Dr. Gray would have held high rank: possessing an highly finished classical education, he was indefatigable in every pursuit that had science for its object, and his labours were unceasing, until its attainment was complete. In his profession, his acquirements were great; and his extreme kind nature, and unwearied attentions to those under his care, must, to the medical department, be a loss of one of its brightest ornaments, and to the government a truly valuable servant. —*Calcutta Jonrnal, May* 20th, 1822.

At Paris, in the 61st year of his age, Henry Grey M'Nab, M. D. Physician to his late Royal Highness the Duke of Kent.

NOTICE TO CORRESPONDENTS.

* *We have received communications from X. Y., G. S., and Philanthropos; all of which are under consideration for our next number.*

** *At present we can do no more than return our thanks to M. D. for his valuable and friendly suggestions, which we beg leave to assure him, are not thrown away.*

*** *The article signed* 'PHILO-RESURECTIONIS' *merits the attention it assuredly would meet with, were it not too lengthened for our circumscribed limits; and, we are of opinion, much of its effect might be lost by inserting it at twice. But, if we may be permitted to use the pruning knife, and to rectify some points, evidently at variance with each other, we pledge ourselves to give it a* NICHE *in a forthcoming number.*

†‡† *We have also to acknowledge the first part of a* POPULAR LECTURE *on* HERNIA; *but until we are favoured with the whole of it, to learn its extent, as well as to guard against disappointment; we cannot commence upon it. As soon, therefore, as our wish is complied with, we shall know how to avail ourselves of its importance.*

§§* *The article containing remarks on the Death of Dr. Pett, came too late for insertion this week: we shall nevertheless avail ourselves of the information it contains, by giving it a place in our next, or the succeeding number. We shall be glad also to see the promised article on* HYDROPHOBIA *from the same correspondent.*

†§† *An interesting and well finished Engraving of Guy's Hospital is forthcoming. A short sketch also relative to this public institution, with a copy from the original* WILL *of the founder, will accompany it.*

§*† *Select and brief communications on all professional subjects, and the sciences and arts connected with them, whether on Midwifery, Chemistry, Botany, Pharmacy, &c. &c., as well as on Philosophy and the Polite Arts, will be gladly received, and duly appreciated from all quarters, in order to enrich, to render interesting, and to promote the utility and general circulation of the Medico-Chirurgical and Philosophical Magazine.* All Letters &c. (Post Paid,) addressed for the Editors, at the Publisher's, &c.

Printed by Plummer and Brewis, Love Lane, Eastcheap;

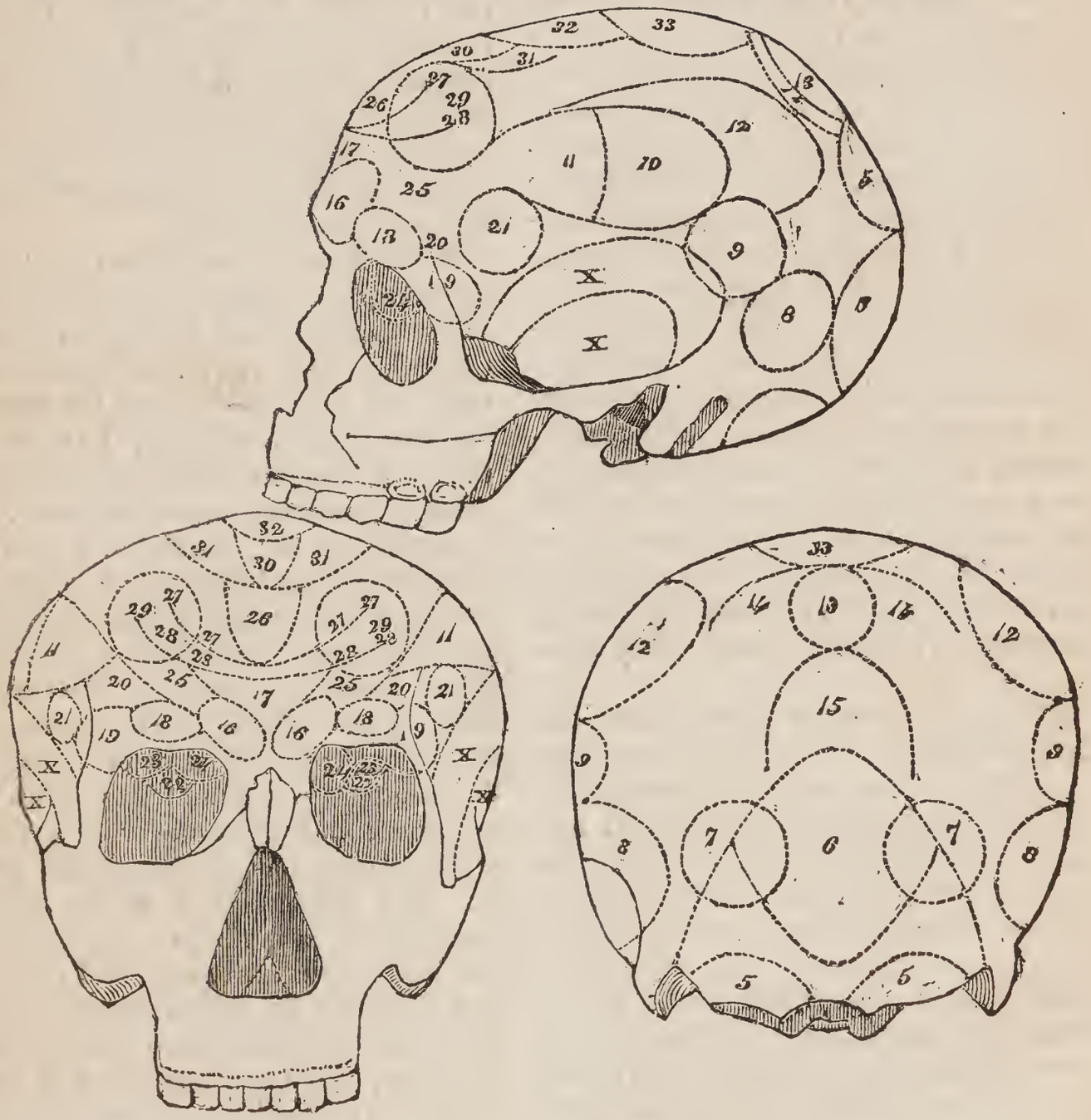
Published by Cox and Son, St. Thomas's Street, and 39, High Street, Southwark. Sold also by Sherwood, Neely, and Jones, Paternoster Row; Simpkin and Marshall, Stationers' Court; Callow and Wilson, Prince's Street, Soho: John Cox, Berner's Street, Oxford Street; W. Stewart, South Bridge Street, Edinburgh; and Hodges and M'Arthur, Dublin.

THE WEEKLY

MEDICO-CHIRURGICAL & PHILOSOPHICAL MAGAZINE.

No. III. SATURDAY, FEBRUARY 22, 1823. *Price 4d.*

"FLORIFERIS, UT APES, IN SALTIBUS OMNIA LIBANT
OMNIA NOS, ITIDEM, DEPASCIMUR AUREA DICTA."



EXPLANATION OF THE PLATE.

1. Organ of the tenacity of life.—2. Of the organ of self preservation.—3. Organ of the choice of nourishment.—4. Cerebral organs of the external senses.—5. Organ of sexual gratification.—6. Organ of the reciprocal love of parents and children.—7. Organ of attachment and friendship.—8. Organ of courage.—9. Organ of the instinct to assassination.—10. Unknown organs.—11. Organ of cunning.—12. Organ of circumspection.—13. Organ of the instinct of rising in rank or estimation.—14. Organ of the love of glory.—15. Organ of the love of truth.—16. Organ of the sense of locality.—17. Organ of the sense for collecting and retaining facts.—18. Organ of painting and the perception of colours.—19. Organ of the arithmetical sense.—20. Of the musical sense.—21. Of the mechanical sense.—22. Organ of verbal memory.—23. Organ of the disposition for learning languages.—24. Organ of the memory for distinguishing and recollecting persons.—25. Organ of liberality.—26. Organ of the genius for comparison.—27. Organ of the metaphysical genius.—28. Organ of the spirit of observation.—29. Organ of wit.—30. Organ of goodness.—31. Organ of music or theatrical talents.—32. Organ of holiness.—33. Organ of perseverance.

CRANIOLOGICAL OBSERVATIONS.

ON THE SYSTEM OF GALL AND SPURZHEIM.

The functions of the brain are so singular and important, that every art has been employed to trace its structure and component parts: without however broaching these complicated and varied subjects, which our present limits, as one special reason, were there no other, forbids us to do; we shall advert to that part only of the Doctrines of Gall and Spurzheim. With respect to the truth or fallacy that may tend to support or to undermine these speculations, we must decline entering upon any laborious disquisition, either for or against them at present. We confess nevertheless, that that part of their doctrines, attributing to certain cranial protuberances, particular qualities of the mind, possesses at least the novelty of being a singular combination of ingenuity and amusement, with every probability of identity. Still it remains to be proved, how far, in point of fact, reliance may be placed on the subject, to confer the lasting impression of veracity and utility upon it.

We shall here, as others have done before us, limit our remarks, by at once considering the brain as the material organ of an immaterial principle; and as the instrument, rather than the agent. The faculties of the soul are found only in animals which have a brain, are generally proportioned in their extent and variety to the size of the brain, are injured or destroyed by the lesion or destruction of this organ.

We also find the intellectual faculties independent of each other; and, even when they exist apparently in the same perfection in one individual, they are exercised with different degrees of activity, at different times. This independence of the faculties is a portion of considerable importance in Dr. Gall's system, our chief object at present; because, he at once draws a consequence from it, that faculties, thus independent in their nature, are not connected in the organ; and, that the evolution of the organs is in the direct ratio of the corresponding faculties. We doubt whether the conclusion is correct; nor, indeed, do we see, if it be admitted, how the author can refuse to allow of the division of what is immaterial, a solecism in physics, or separate independent powers acting in different parts; in fact, of as many souls as there are faculties. Dr. Gall thinks, however, that the evolution of different faculties is the cause or effect of distinct protuberances of the cranium, and that the peculiar mental power of the individual, may be ascertained by inspecting the scull.

With these views, he has compared the sculls of animals and those of men, whose faculties are analogous or contracted. His enquiries, have, it is said, not only ascertained the facts to be hereafter mentioned, but proved that the faculties called instinctive in animals, as attachment, cunning, circumspection, &c. are found equally in man; that the bulk of the organ determines the genius, while the reciprocal proportion characterises the individual; that the disposition of every faculty, given originally by nature, may be expanded by exercise or favourable circumstances; sometimes even by diseases; but it can never be created, where nature has not originally given it. The accumulation of the organs, he remarks, is made in a regular manner from behind forward, and from below upward; so that animals in their approach to man in the variety of their faculties, have the superior and anterior parts of the brain more expanded. In the most perfect animal man, there are, in the author's opinion, organs in the anterior and superior parts of the frontal and parietal bones, destined for the faculties, which belong exclusively to him. In this view Gall's system entirely corresponds with the observations of Camper on the facial line.

The following are a few of the sin-

gular observations by which Dr. Gall endeavours to establish his system.

In conformity with a part of his opinions, he considers the medulla-oblongata as the seat of the *organ of the tenacity of life*. The bulk of this part is proportioned to the size of the occipital hole; and he finds it larger in women than in men; proportionally very large in the cat, the beaver, the weasel, &c.

The organ of lasciviousness is, in his opinion, at the basis of the scull, behind the medulla oblongata. It is only conspicuous about the age of puberty, and in castrated animals is never observed. In the ape, the rabbit, and the cock, this part of the scull is very large. It is peculiarly large in pigeons and sparrows, so as almost to form an epiphysis; and, in some human sculls of idiots, distinguished for lasciviousness, this part was very protuberant.

The organ of attachment is peculiarly large in spaniels, and less visible in greyhounds.

The organ of courage, contiguous to those of "parental attachment and affection," explains, in our author's opinion, the exertion of courage from animals and human beings, in defence of their young, or their particular friends. This organ is very inconsiderable in the hare, the sheep, and the greyhound; but very conspicuous in the hyæna, the lion, the wolf, and partially only in the bull-dog. Mr. Gall adduces as a proof of the organ of courage, the coward, when affrighted, "scratching the back part of his head behind his ears, as if he wished to excite its action!"

The organ of pillage is nearly connected with that of *courage*. Our author found it in POETS. It is very conspicuous in the heads of camels, foxes, cats, pies, &c.

The organ of the sense of locality, constitutes, with respect to places formerly seen, local memory; with respect to future objects, combinations of new localities. This organ is frequently conspicuous in birds of passage, in landscape painters, and in the scull of the great Frederick. It is fainter from age. The frontal sinus enlarges inwardly, and diminishes this portion of the brain.

The organ of the sense for collecting and remembering facts, is subject to a similar change from age. Among animals, it is chiefly conspicuous in the elephant. "Among men, (we now employ Dr. Gall's own words) I have found this organ, not only in those who have a retentive memory for facts and things, but in those who have what are called systematic heads: who arrange their facts, and draw conclusions from them: in those who possess a quick perception, and are distinguished by an anxiety of knowing every thing. It even appears that the operation of combining facts, to draw conclusions from them, is the chief action of this organ; at least the elephant, who concealed the water in his trunk to pour on the person who offended him the day before, arranges many facts, and draws from thence a truly logical conclusion; nor is there any other organ in the elephant's head, to which we can refer this power. The involuntary motion of a man, who perceives that he has reasoned incorrectly, supports these suppositions; he strikes the middle of his forehead.

The organ of painting, and the distinction of colours, Gall has found in many great painters, and has particularly noticed it in the head of a Raphael.

The organ of the musical sense is very distinguishable in singing birds, but does not exist in those whose notes are harsh and inharmonious. He found it very distinct in the heads of Mozart, Haydn, and Pleyel.

The organ of verbal memory is distinguished by remarkable projections of the eyes.

The organ of liberality lessens as a man grows old: in fact, he then becomes avaricious:—it is very near the organ of painting and music; and this, he thinks, is the reason why men

of such talents are generally prodigal. We wish we could have examined the head of Gainsborough!

The organ of the metaphysical spirit is found in the heads of the ancient philosophers, particularly Socrates; among the moderns in KANT.

The organ of goodness forms that oblong elevation found constantly in the head of Christ and the Virgin, painted by Raphael and Correggio; and contributes to convey the ideas of gentleness and goodness, which are so attractive. It is found in the sculls of all who are naturally good, and is wanting in those who are wicked. Animals of prey have no vestige of this organ.

The organ of music and of theatrical talents Gall has found in all the great singers and actors. In those who are born deaf, and are constantly dumb, it is very conspicuous; as they are obliged to depend on gestures for the conveyance of their ideas.

The organ of religious veneration is on the top of the frontal bone; and it is this, observes M. Gall, which has probably induced all races of mankind to look for their divinities in the superior regions, since "there is no philosophical reason why we should not place them below, as well as above ourselves.

The organs described by Gall are in all thirty-three in number, which the plate with the explanation and references will point out. These are some of the most singular f his remarks; and from them our readers may form a judgment of his abilities, and the probabilities of his system.

BIOGRAPHY.

DR. AIKIN.

JOHN AIKIN, known to the public during the last forty years, as a very pleasing and accomplished writer, was born at Kilworth, in Leicestershire, and was the son of the Reverend Mr. Aiken, a dissenting minister, who kept a classical academy at that place, and was afterwards one of the professors at Warrington. He was, at a suitable age, apprenticed to a Surgeon and Apothecary, at Uppenham, in Rutland; and, on completing his term, was sent to Edinburgh, where he graduated as M. D. He settled in his profession at Yarmouth, and subsequently removed to Norwich. His celebrated sister Mrs. Barbauld, and her husband, re-opened a seminary at Thetford, in that county, and thereby adding to the weight of his local influence. Yet, although the most amiable of men, he was neither emperiral enough, nor sufficiently warm and popular in his address, to supersede others in their profitable practice. To avail himself, therefore, at once of his public reputation as a man of letters, and of the society of his sister, who then had settled at Hampstead, he removed to London in 1794. Here he sought to combine practice, with literary engagements among the booksellers; but, as the public never favour any man in two capacities, his success as an author shut him out from medical practice; and, although he settled professedly as a man of letters, in 1802, at Stoke Newington, where Mr. and Mrs. Barbauld also took up their residence. A few years since he suffered a severe attack of the palsy, which deprived him of his corporeal and mental faculties; and, to other attacks of this disease, he at length fell a victim in December, 1822, in the 76th year of his age.

His early works consisted of a "History of Medicine;" of a work "Medical Biography;" and of a "History of Mancheste,r" in which he was engaged by Stockdale, the bookseller. His most original productions were the "Evenings at Home," in six small volumes; his "Letters to his Son," and his "Annals of George the Third." He translated "Select Lives from Diderot and d'Alembert's Memoirs of the French Academicians;" and he compiled, under an engagement with Kearsley, "A General Biographical Dictionary," not the most popular, but beyond question, the best in the language. He was, besides, a frequent contributor to the Monthly Review; and he assisted largely in the Annual Review, edited by his son. As an editor, he produced editions, with very elegant critical prefaces, of some of our best poets; and he co-operated in many other things as editor or reviewer, without his name appearing; his engagements being always fulfilled with good taste and scrupulous fidelity.

PHYSIOLOGICAL OBSERVATIONS.

Dr. Roget, commenced, last Tuesday week, a course of Lectures on Comparative Physiology, at the Royal Institution. He observed that this science or the study of the phenomena of life, differs from all the other branches of

philosophical inquiry, by its involving the consideration of the *final*, as well as the *physical* causes of these phenomena; and that a new principle of arrangement was thus introduced, which is scarcely ever applicable in the sciences relating to the properties of inert and inorganic matter. The phenomena of living beings do not admit of being explained simply by the operation of the laws of mechanism or of chemistry; but they imply the agency of principles distinct from those which govern the inorganic world, and bearing the strongest evidence of design and of adaptation to particular purposes. Thus the principal object of Physiology being the study of the functions of life, this science opens a rich and inexhaustible field of inquiry, abounding with objects of the highest interest, and involving the most important concerns of humanity. It discloses the most sublime views of the magnificent plans of the creation, and of that transcendent power and intelligence that can pursue, to its remotest terminations, the immeasurable chain of causes and effects, which are instrumental in the accomplishment of its benevolent purposes.

As in the preceding course Dr. Roget had considered each function separately, he now proposes to examine the several combinations of functions, as they are found to exist in each class of animals. By way of introduction to this view of the subject, he proceeded to take a general and comprehensive survey of the system of the Animal Economy, so as to present, as in a man, a view of the bearings and relations of each object. He conceived that a more thorough insight will be obtained into the designs of nature, if, in following her footsteps, we at the same time endeavour to anticipate her designs in the formation of the several organs composing the animal frame. Supposing ourselves, therefore, called upon to combine the materials of the body, so as to answer the various purposes of animal existence, let us ask ourselves how we should proceed? The being to be formed must have two essential attributes, that of perception, and that of voluntary motion. The means furnished us for the solution of this problem, exist in the properties of the medullary substance of the brain, the actions of which are accompanied by corresponding affections of the sentient principle. We are to devise means then for establishing communications between external objects and the brain, so that the impressions these objects make on several parts of the body shall be immediately conveyed to the brain. These conductors of impressions are the nerves; and the agency employed for this purpose, and which, in as far as respects the velocity of its action, is somewhat analogous to electricity, is the nervous power. Nerves must be extended to all the parts to be rendered sensible, and more especially to the skin, since it is of the greatest consequence that objects in contact with the surface of the body should be instantly perceived. Other nerves, again, having structures adapted to the kinds of impression they are designed to convey, must be formed to receive the actions of light,--of the undulations of the surrounding medium,—of odoriferous effluvia,—and of the chemical qualities of liquids, in organs specially formed for directing these impressions on the expanded extremities of the respective nerves, which thus become the vehicles of actions, conveyed to the brain, giving rise to the perceptions of vision, of sound, of smell, and of taste.

To these faculties of perception must be added that of voluntary motion. The brain is again the organ of volition, as of sensation; and the change in the brain, which follows the mental act of volition, must be transmitted to the organs of motion. This is effected by a particular set of nerves originating in the brain, and distributed to the muscles. The remarkable property inherent in the muscular fibres, of contracting with prodigious force, is the power to be employed for this purpose.

As in a manufactory where the force of steam is the prime mover of the whole of its machinery, so in the animal system is the muscular power resorted to on every occasion where mechanical force is required. The objects of the movements of animals must evidently be very various; but the power of laying hold of objects, of giving them different impulses, and that of transferring the body from one place to another, may be regarded as some of the most general of these objects. In order to effect them, the agency of inflexible levers, capable of sustaining the weight of the trunk, and of furnishing fixed points of attachment to the muscles, must be employed. Such is the office of the bones, the assemblage of which composes the skeleton, or solid frame work of the machine. Dr. Roget then explained the principal mechanical expedients that were to be resorted to, in order to facilitate motion, to economise power, and to suit the convenience of other functions requiring particular forms of structure. In this part of the Lecture, the uses of ligaments in forming the joints, and the advantages of tendons in regulating, directing, and combining the force of the muscular fibres, were particularly specified.

Dr. Roget next proceeded to give a general view of the functions of nutrition. The body of an animal, he observed, however skilfully constructed in point of mechanism, would still contain within itself the principle of dissolution. The various actions that take place in every organ tend to destroy both that refined mechanical structure aud that peculiar chemical composition, which are necessary to enable them to carry on their respective functions in the animal economy. Fresh materials derived from external sources are wanted, in order to repair the derangements in their organization, to recruit their exhausted powers, and to extend their dimensions during the period of growth. For these purposes, the nutritive functions must be called into play. Food must be taken into the body, and must be converted, by a long series of operations, into a substance assimilated in its qualities to the substance of the different parts of the body. It must be masticated in the mouth, digested in the stomach, converted into chyle in the intestines, absorbed by the lacteals, and conveyed by the thoracic duct into the general reservoir of circulating fluids. By a second system of organs, consisting of the heart, the arteries, and the veins, nutritious fluid, which has now assumed the form of blood, is distributed to every part of the body, and its circulation is completed by the unemployed portion being brought back to the heart. But the blood thus returned, is necessarily surcharged with carbonaceous matter, which remains after its other principles have been employed in nutrition, and which imparts to it a dark purple hue. In this state it requires to be purified by contact with the atmospheric air in the lungs. During respiration this noxious matter is made to combine with oxygen, and is exhaled in the form of carbonic acid gas. Dr. Roget entered into a description of all these processes, which he illustrated by drawings, exhibiting the relative situation of the organs subservient to these functions.

He next adverted to the mechanical conditions that are requisite for the proper conformation and arrangement of all these organs. He pointed out the general plan on which their structure is modelled, and described the animal material out of which they are formed, its modifications of fibrous, of cellular, and of membranous textures, and the additions of calcarious matter it receives in the harder substances of shell and bone. And lastly, he explained the manner in which the movements of the vital organs are connected together, and rendered independent of the will, by means of a particular set of nerves, having no communication with the seat of volition or sensation, and composing what are termed the

ganglionic and sympathetic systems. These nerves secure the individuality of the whole, and preserve the harmony of all its actions.

Heads of Lectures *on Ulcers, with Remarks and Observations thereon, by* Mr. John Abernethy, Sir Astley Cooper, Sir E. Home; *&c. &c. &c.*

(Continued from Page 25.)

An indolent ulcer is sometimes attended with a varicose state of the vena saphena, and this is found more troublesome to heal than the preceding, as well as more likely to recur afterwards. Compression, is the most approved mode of treating this state, by means of a common roller extended from the foot to the knee, with a horizontal position. Cases are stated by Sir E. Home, where this plan of treatment has failed; and of his having, in similar ones, operated, by securing the vein as it passes over the joint of the knee: he merely ties the vessel without dividing it. This plan, however, has but few advocates, if any, at the present moment, owing to the very serious consequences that have been known to result from its adoption.

A sloughy sore with a black aspect, is another obstacle to the healing process. The treatment in this case is very simple; by using a strong solution of nitrous acid; forty to sixty drops to two pints of water. Poultices of stale beer, or lees of wine, or crop of beer, (the remains of the butt,) mixed with oatmeal, will be found serviceable; and, in some cases, a table spoonful of yeast will be an improvement in contributing to restore the ulcer to a healthy surface. In consequence of sinuses forming, the mode of treatment when these are deeply seated, will be to inject a solution of the muriate of quicksilver, in the proportion of two grains to an ounce of water, in order to excite inflammation, and produce adhesion of the sides. Tincture of Canthardis has been used for the same purpose. A caustic bougie may also be used for the same purpose. If the sinuses have two openings, it will be best to lay them open, and introduce proper applications. A sinus in the rectum, or fistula in ano, is not to be cured in this way, and rarely by injection. The next impediment to the healing of ulcers, is the suppression of the menstrual discharge; in this case, it is seldom found disposed to heal, and will continue in this state as long as the cause remains. It becomes necessary here to use stimulants to excite them to a healthy action, and the best medicine to answer this purpose is Dr. Griffith's Mixture, composed of myrrh, steel, zinc, &c. And to the sore the best applications will be mercurial ointment, or the liquor calcis. These applications however, will be of little service, unless we are successful in restoring, at the same time, the natural vigour of the constitution. Indurations in the lower extremities are not unfrequently observed in persons having the menstrual discharge obstructed. Sores are very subject to become fungous, in consequence of extraneous bodies irritating the granulations, and are commonly attended with bloody serum, instead of pus, of an offensive nature. Nails growing into the skin often produce fungus, from the great irritation they produce. It was usually the custom to destroy these excrescences by means of caustic applications, but this kind of treatment is evidently improper, as the fungus has always been found to be reproduced; which is by no means to be wondered at, for as long as the irritation, produced by the nail existed, this effect must continue. The nail is cut out by putting the foot or hand into warm water, and suffering it to remain there for some length of time: it is then to be scraped through with a bit of glass; a piece of lint is afterwards put under the nail for the purpose of elevating it, when, it is to be cut off. This operation is also performed in another manner; viz.—by passing a

pair of scissors about one eighth of an inch in length under the nail, for the purpose of slitting it up; but, this method, although quicker, occasions considerable pain. Sores of this nature, apparently trifling in themselves, have been known to produce such a disordered state of the parts, as to call for the necessity of dissecting into the skin, and gland secreting the nail; previous, however, to taking this step, it is adviseable to try the liquor calcis, or Ung. Hydrars. Nitr.

(To be concluded in our next.)

HOSPITAL REPORTS.

On Monday the election for a Physician to the Western Dispensary took place. The candidates were Dr. Allat, and Dr. Furnival, (brother to the late Apothecary of the Institution,) which terminated in favour of the latter gentleman.

We omitted to state in our last number, that Mr. South, in conjunction with B. Cooper, Esq. supersede Mr. Aston Key, as Demonstrators of Anatomy at St. Thomas' Hospital.

LONDON HOSPITAL.

A labouring man (John Kelleon,) aged about forty, had his finger jammed a few days back driving a truck, and it was found necessary to amputate, but mortification having ensued, he died on Friday last.

SEAMAN'S HOSPITAL, ON BOARD THE GRAMPUS, WOOLWICH.

The following is the report made on Wednesday last, at the London Tavern, where a Meeting of the Society connected with the support of this institution, (the Bishop of Chester in the chair,) took place, of the number of men received into it during the last year, between 23rd February, 1822, and 18th February, 1823.—

Total number received	788
Of which cured and discharged at the request of the parties	236
Ditto having obtained ships	325
Ditto ships found them by the Committee	70
Ditto conveyed to their homes	12
Absented themselves	6
Expelled after being cured, for misconduct	7
Died	30
	686
Under cure and convalescent	102
Total	788
Number received in the year 1821	413
Ditto in the last year	788
Total number since its commencement	1201
Completely clothed, after being cured	11
Supplied with shoes and stockings only	98

Sir Francis Ommaney and Alderman Venables, severally addressed the Meeting; and in feeling terms, pointed out the destitute situation of poor sailors, and the beneficial effects that may result from this institution; and strongly enforced the claims which they have for support on the more fortunate classes of society.

RETROSPECTIVE SURGERY.

(Continued from page 28.)

2. With respect to limbs violently contused, which some have made a practice of cutting off before they tried any other remedy; M. Bilguer declares expressly against amputation, even if the bones, as well as flesh, are bruised and crushed by the fall of a large beam, a mass of stone, or by a cart wheel, a screw, or a press: in these cases, he says, the patient has a better chance, even for life, setting the limb out of the question, if it is not, than if it is, cut off. Two things are generally dreaded, a mortification, and hæmorrhage: as to the mortification, if what has already been said, be worthy of any regard, it is not probable. With respect to the hæmorrhage it has

sometimes stopped, even in these very cases, without the assistance of a surgeon. The method of cure directed by this author, is as follows:—

When the lower parts of a shattered limb adhere by a little flesh or skin, so that there is no hopes of a re-union, they should be separated entirely. When pieces of bone jut out, they must be sawed off, whether firm or moveable: all the other small splinters, either held by the flesh, or adhering to the bone, that can be removed without violence, or a fresh effusion of blood, should be extracted by the hand, or a proper instrument; the limb should then be slightly compressed between the hands, and gently stroked lengthways from above downwards, so as to restore it as much as possible to its natural shape: the sore should then be dressed with a digestive, adding a little essence of myrrh, or solution of mastich; the whole covered with dry lint, and the same bandage applied as in amputations, but not so tight as to cause pain, or increase the inflammation: the whole should be then moistened with as much spirit of wine as may penetrate the parts affected, and care must be taken to extend the limb in a right line, and to lay it soft.

Till the suppuration becomes plentiful, it should be dressed only once in twenty-four hours, but afterwards twice a day; and such dressings as touch the bone or flesh, should be covered with lint dipped in solution of mastich, balsam of fioraventi, or some other balsamic essence, to prevent the suppuration from becoming too copious; and at each dressing, all the little shivers which do not re-unite, and which by degrees come to be separated without violence, should be taken away.

Care should be taken to promote the coalition of the larger fragments, by light compression of the hands, and a gentle tightening of the bandage. Those that do not coalesce in a month should be cautiously and tenderly loosened, so as to bring them away. If any are cracked as nigh as the articulation, they should be left to nature.

If the patient is weakened by loss of blood, he must be supported by broths, with herbs boiled in them, and with wine and water; he should also take, every four hours, half a drachm of the bark till the pulse is sufficiently raised, and the suppuration is laudable; he may then be allowed meat, and his drink should be water, acidulated with vinegar or vitriol.

When the suppuration is too plentiful, and the wound appears disposed to heal, the patient should be purged once or twice with Epsom salt, some absorbent powders having been previously administered for a few days. He should drink during the day, a slight decoction of the bark; before and after meals, a little strengthening acid elixir; and, in the evening, he should take a small dose of the bark in substance.

The strengthening elixir is thus made: "half an ounce of the extract of wormwood; of that of gentian, lesser centaury, green oranges, and buckbean, of each a dram; rectified spirit of wine, four ounces, and spirituous mint water, one ounce: let the extracts be dissolved in the spirits, over a gentle fire; strain them, then add to the strained liquor, half an ounce of dulcified spirit of nitre, and thirty drops of oil of vitriol."

M. Bilguer then describes a fever, which frequently supervenes in these cases, and gives directions how to stop it.

When the bones of a limb are not quite broken through, and the parts suspended only by a small portion of flesh and skin, but so much shattered that the limb may be moved any way, and seems to hang useless, the aperture made by the wounding body must be dilated, and the flesh separated from the bone, that the splinters and extraneous substances may be extracted; the dressings must be the same as before directed.

If a bullet has penetrated the cavity of a bone, the bone must be laid bare,

and afterwards pierced with two or three trepans, that the extraneous body and shivers may be extracted.

If a bullet has made its way into one side of a joint, and splintered several bones at a stroke, the same method must be followed.

Care must be taken to fix the limb in its natural situation, to keep the dressings sufficiently tight above and below the wound; to promote the consolidation of the larger pieces of bone, by keeping them firm in their places, and preventing the re-absorption of pus.

M. Bilguer's observations confirm those of Horstius, that patients who have lost a great portion both of the tibia and fibula, may, nevertheless, after their cure, walk with ease, and halt but very little.

M. Bilguer observes, that sometimes the wounds dry up on a sudden, become corrupted, and exhale an infectious stench; the neighbouring parts are inflamed for some days, and then leave an oedematous tumour, which either produces an abscess, with a laudable discharge, or degenerates into a malignant sore, without an abscess, which sometimes swarms with maggots: for this untoward appearance of the wound he directs proper remedies.

3. In cases of violent contusions, where a great quantity of extravasated fluid under the skin produces the appearance of a mortified eschar, and though the skin itself is not broken, yet the bones under it are dislocated or fractured, the treatment should be nearly the same as in a mortification, and the part affected should be constantly bathed with emollient fomentations, without any stimulating or astringent ingredient: if the bones are luxated, they must be reduced, but left without bandages.

If the contusion has not produced a mortified slough, but has yet fractured the bone, the applications should be very mild, and no incisions should be made: the two ends of the bone should be brought together, and secured by compresses and bandages; and the whole dressings stouped with discutient and vulnerary fomentations.

4. As to wounds of the large blood-vessels, the surgeon may always, by proper dilations, come at the wound, and stop the bleeding, by ligatures or astringents, or both; so that in that case amputation can never be necessary: and experience has shewn, that after the operation for the aneurism, the member which it might be supposed would have perished for want of nourishment, has recovered heat, motion, and strength, even when the trunk of the brachial artery has been cut through: this therefore, when wounded, may be tied without fear, and the preservation of the limb may be provided for by aperient spirituous fomentations, and gentle frictions, which contribute to open and enlarge the small vessels.

5. As to a caries of the bone, when it is recent and inconsiderable, there can be no pretence to amputate, but the bone must be laid bare as far as the caries extends, and scraped with a scalpel, or perforated in several parts with the spike of a trepan. When the caries has reached the opposite part of the bone, the crown of the trepan must be used to take out the entire piece: medicines proper in this case are well known, but the mineral acids must never be employed, not even Hoffman's anodyne mineral liquor; for all do hurt. When the caries is removed, the cure is to be completed by a nourishing, but not oily diet. The dressing should then consist only of dry lint, taking great care to exclude the access of air from without.

When the caries is accompanied with a vitiated state of the blood, the external treatment must be the same, and proper internal remedies must be added: a caries from a venereal cause may be cured like any other.

Amputation is useless while the morbid cause remains: and when it is removed, the cure may be effected with-

out amputation: the portion of bone taken away will be supplied by a callus, as appears by indubitable testimony.

6. The last case is a cancer; concerning which this author says very little, except that it should be extirpated before it takes root, or not at all.

The whole of this interesting work is founded on the author's own abundant experience in the military hospitals of Prussia, during the late bloody war; where a much greater proportion of those who were so wounded, as, in the general opinion, to justify amputation, recovered, than are known to recover of those on whom that operation is performed.

TO THE EDITOR OF THE MEDICO-CHIRURGICAL MAGAZINE.

MR. EDITOR,

Sir, permit me through the medium of your Weekly Magazine, to offer the following observations on the death of Dr. Pett.

THE catastrophe of that much lamented physician, has filled all Hackney, and the scientific world with regret. A funeral sermon by the Rev. Mr. Aspland has been preached, and printed, to commemorate the many virtues of this philanthropist, who met with an untimely end, by too eagerly pursuing the objects of his enquiries. In sewing up the body of the person recently dead, he just punctured his finger. Even the microscope could scarcely distinguish the smallnessof the perforation. But a particle of venom had inoculated the part; and this soon was destined to pervade the whole system. A question most interesting is, what method should be pursued when such an untoward accident shall have occurred? When a student at Guy's Hospital, dissecting very much, I have occasionally glanced with the dissecting knife, and cut the finger. Knowing the danger, I have taken instant alarm, and washed out with hot soap and water the envenomed part; after this I have applied a ligature round the wounded finger, and have repeatedly dipt it in vinegar, or applied lemon-juice to it. I never used the caustic; because I have known, that when this has been applied to another species of inoculation, absorption has been quickly excited, and that disease which we would wish to be local, has the quicker got into the system. From this method, more than from caution when dissecting, I have always remained free from those effects often produced by this dangerous poison, with which it is said, some Indian Tribes envenom their darts. The next consideration is what is to be done when the poison begins its operation? I have seen it take place in the case of a most ingenious young surgeon, whose death would have been a most serious loss to the profession; I scarce need mention the name of MR. COX, a pupil of SIR ASTLEY COOPER. I once saw in this gentleman, a red line, the track of the absorsent, like a small vein, injected by red wax, or a thread of red silk, reached the inoculated part to the axilla, with great tumefaction of the arm. By a low diet, cooling saline aperients, and the application from first to last, of thirty leaches on the affected part. I witnessed with delight the perfect success of this practice, instituted by himself, or derived from his able master; and would recommend such a practice to the attention of the faculty at large, and feel happy in communicating it to the world, through the medium of your excellent Weekly Journal, which bids fair to become a popular vehicle of professional communications; and, as such, ought to be in the hands of every Medical practitioner.

I am, Sir,

Your obedient humble Servant,

R. J. THORNTON, M. D.

Member of the Royal London College of Physicians, &c. &c.

As the WEEKLY MEDICO-CHIRURGICAL AND PHILOSOPHICAL MAGAZINE *is open to all parties and influenced by none, we cannot refuse giving insertion to the following strictures elicited in consequence of* DR. BADDELY'S PAMPHLET, *relative to the miraculous cure of Miss O'Conner, of Newhall Convent, Essex.*

MR. EDITOR,

That an able and intelligent physician of the nineteenth century, should send forth to the world a *Tale*, more worthy of the dark ages of monkish superstition and popular credulity, than of this enlightened period, is no small matter of astonishment. I am extremely sorry that a respectable member of the profession to which I have the honor to belong, should be the author of such a tissue of absurdities.

Dr. Baddely has for many years been held in the highest possible respect in that part of the country, of which I am a native; and I extremely regret, that in his declining years, he should lessen that esteem which his extensive practice, and long standing as a physician, had so firmly established.

In his Pamphlet, Dr. B. relates the case of a Nun, in the Convent of New Hall, near Chelmsford, who had been afflicted for a considerable length of time, with a swelling and inflammation extending from the ball of the thumb, along the fore-arm, and up as high as the axilla. She had been attended by the surgeons of the town, as well as by an eminent practitioner from London, but without any apparent benefit.

Hearing of the wonderful cures performed by one Prince Hohenlohe, she was induced to write to him, and request his assistance to relieve her from her sufferings, which he willingly granted, with an injunction that she should offer up her prayers on a certain day, (the 3rd of May; held in reverence by the catholics) at a certain hour; with a promise that he would be at his devotions at the same time. All this she strictly attended to, and immediately after her prayers were finished, she experienced a tingling sensation all up the arm, and from that instant the cure rapidly advanced, until the arm became as sound as the other.

This is the substance of the Doctor's publication. This the wonderful miracle which he sets forth. He says that he saw the arm ten days after the prayers had been offered, and expressed his surprise at the change which had taken place in so short a time. Miss O'Conner then related to him the instructions of the *Royal Physician*, and the benefit which had resulted: this caused Dr. B's name in conjunction with that of Prince Hohenlohe, to appear as the champion of Miss O'Connor.

Now Dr. B. candidly confesses that he did not see the arm until ten days after the prayers were offered; a circumstance which entirely destroys the effect of a miraculous cure, as it ought to have been *complete* and *instantaneous*. I have seen many very bad cases of the same description as Miss O'Connor's, owing I suppose to some change in the constitution, get well all at once, to the surprise of the surgeon, and gratitude of the patient.

The reason the Dr. gives for publishing the Pamphlet, is the vindication of Miss O'Connor's character: what the motive may be that induces him to take up his pen in defence of the *fair nun*, is to me unknown; nor would I wish to pry into that which concerns him alone. That he has been imposed upon by the inhabitants of NEW HALL is very evident; whether wittingly or unwittingly, I cannot pretend to say. In short, this publication has exposed its author to many attacks, both from his own profession, and the public at large; which I fear have caused him many hours of uneasiness. Had he well considered the end, before he sent such an ephemeral production to the press, I am convinced his own good sense would have prevented him the

gratification of seeing his name in print, as the protestant vindicator of catholic superstition. G. S.

Feb. 11th, 1823.

ON ACUPUNCTURATION.

We are happy to find, since the appearance of Mr. Churchill's treatise on Acupuncturation, that this operation has lately been resorted to, with a degree of success that warrants a repetition. It also calls for a serious consideration of its efficacy in a therapeutical point of view; inasmuch as it is likely to be revived with more than ordinary pretensions among the modern modi medendi.

We have been credibly informed that Mr. Martin, of Horsham, has operated successfully by acupuncturation upon the Earl of Egremont, by whom, in consequence he (Mr. M) has since been introduced to some of the principal gentlemen about the country where they reside. It has also been reported that Mr. Martin is coming to town to operate upon a certain great personage; when, it is said, Sir Henry Halford, and the rest of his Majesty's medical corps, will witness the operation, and bear testimony to its effects: and, it can scarcely admit of a doubt, that the gentleman (Mr. Churchill,) who has been so assiduous in promoting the introduction of acupuncturation into European practice, by means of a well written, intelligent and communicative little treatise on the subject, will be among the professionals on this occasion.

In illustration of this statement relative to acupuncturation, we copy the following letter addressed to the Editor of the Philanthropic Gazette.

"SIR,

"On reading your paper of the 15th inst.; the extract which you gave from the Maidstone Gazette, proving the utility of the *Galvanic Points*, as instanced in the man who was thereby enabled in a short time to lay aside his crutches, and walk to church, powerfully brought to my recollection what I had lately been reading, of a new branch of medical practice, which I understand is now gaining a fast hold of the public mind in London, and in some parts of the country. A small book was published last year, by a Mr. Churchill, Surgeon, London, called "A Treatise on *Acupuncturation*," in which the author details several instances of its most certain success in cases of most distressing Rheumatism, Tic Doloreux, and other local diseases. By your permission, I shall transcribe one of the cases for insertion in your pages; which from your readiness to bring any thing before the public likely to benefit mankind, will, I trust, not be withheld from your columns.

It may be proper to premise, that the sole part of the practice consists in the insertion of a fine instrument, like a small needle, near the part affected, which is scarcely felt by the patient, while in a few minutes he is overjoyed by the diminution, and then instantaneous removal of his pain!

A plate is given in the book, of the needles used, to which I must refer your readers, who may wish for further information. The following is the first case given:—"George M'Laughlan, at thirty years of age, a bricklayer, came to my house in November last, supporting himself by a stick in one hand, and resting the other against the wall as he proceeded. The body was bent at nearly right angles with the thighs, and his countenance indicated acute sufferings. He had been attacked, he said, three days before, with darting excruciating pains in the loins and hips; every motion of the body produced an acute spasmodic pain, resembling an electric shock; and the attempt to raise the body to an upright position, was attended by such insupportable agony, as obliged him to continue in this state of flexion rather than encounter it by altering his position. I directed him to place himself

across a chair for support during the operation; and I immediately introduced a needle of an inch and a half in length, into the lumber mass, on the right side of the spine; in two minutes I observed that he seemed to rest the weight of his body more upon his limbs and in the next instant, without any inquiry being made, he observed, that he felt his limbs stronger, from the "pain having left his hips." He next indicated, that the disease was lessened by raising his body. The instrument having remained in its place about six minutes, the patient declared he felt no pain: when the needle was withdrawn, the man arose, adjusted his dress, expressed his astonishment and delight, and having made the most grateful acknowledgements, left the house with a facility as though he had never been afflicted. The relief was no doubt permanent, as he did not return, which he most probably would have done, had he suffered a relapse, &c. &c.*

Your's &c.

A CONSTANT READER."

Jan. 23, 1823.

MELANGE.

For the amusement and information of our readers, we present them with a few of the *recipes* for Quack Medicines, taken from Dr. Paris' Pharmacologia, which this indefatigable author has been at the pains of examining; the formulæ of which he has boldly published in this interesting work.

Anderson's Pills.—Aloes, jalap, oil of aniseed.

Aromatic Lozenges of Steel.—Sulphate of iron, and tincture of cantharides.

Barclays Antibilious Pills.—Ext. colocynth two drachms; ext. of jalap, one drachm; almond soap, one drachm and a half; guiacum three drachms; tartarized antimony, eight grains; essential oil of juniper, carraway and rosemary, of each four drops, formed into a mass with syrup of buckthorn, and divided in sixty-four pills.

Bates' Anodyne Balsam.—One part of tincture of opium, two parts of opodeldoc.

Black Drop.—Take half a pound of opium sliced, three pints of good verjuice, one ounce and a half of nutmegs, and half an ounce of saffron; boil them to a proper thickness, then add a quarter of a pound of sugar, and two spoonfuls of yeast; set the whole in a warm place near the fire for six or eight weeks, then place it in the open air until it becomes a syrup; lastly, decant, filter, and bottle it up. One drop is considered equal to three of the tincture of opium of the Pharmacopœia.

Brodum's Nervous Cordial consists of the tincture of Gentian, Calumba, Cardamom, and bark with the compound spirit of lavender and wine of iron.

Chelsea Pensioner.—A cure for the Rheumatism. Powdered guacum, one drachm; rhubarb, two drachms; cream of tartar, one ounce; flower of sulphur, two ounces; one nutmeg, finely powdered; make into an electuary, with one pound of clarified honey; two large spoonfuls night and morning.

Ching's Worm Lozenges.—Chiefly calomel and jalap.

Colley's Depilatory.—Quick lime and sulphurate of Potash, (we suspect orpiment in this compound).

Daffy's Elixir.—Compound tincture of senna, of the Edinburgh Pharmacopœia, sweetened with treacle, and flavoured with aniseed and elecampane root. *Dicey's Daffy*, and *Swinton's Daffy*, differ little from each other.

Dalby's Carminative.—Magnesia, forty grains; oil of peppermint, one drop; of nutmeg, two drops; of aniseed, three drops; tincture of castor, thirty drops; of assafœtida, fifteen drops; of opium, five drops; spirit of pennyroyal, fifteen drops; compound tincture of cardamoms, thirty drops; peppermint water, two ounces.

Essence of Colt's Fool.—This preparation, (says Dr. Paris) consists of equal parts of the balsam of peru, and the compound tincture of benzoin, to which is added double the quantity of rectified spirits of wine; and this forsooth, is a *pectoral for coughs!* if a patient with a pulmonary affection, should recover during the use of such a remedy, I should rather designate it as a lucky escape, than a skillful cure.

Whitehead's Essence of Mustard—Oil of turpentine, camphor and spirit of rosemary, with a little flour of mustard to colour it.

Freeman's Bathing Spirits.—Opodeldoc covered with Daffy's elixir.

Godbold's Vegetable Balsam.—Honey and vinegar.

---

* This is only one case out of a number of equally interesting in the treatise alluded to. We hope soon to have to communicate to our readers some further important cases and facts on the subject.—Ed.

Gowland's Lotion.—A solution of corrosive sublimate, in emulsion of bitter almonds.

Jame's Analeptic Pills.—James' powder, gum ammoniacum, pill of aloes, with myrrh, of each equal parts, made into a mass with tincture of castor.

Norris's Drops.—A coloured solution of tartarized antimony in rectified spirit.

Remedies for the Hooping Cough.—Either opiates or medicines containing sulphate of zinc.

Roche's Embrocation for the Hooping Cough.—Olive oil, mixed with half its quantity of the oils of cloves and amber.

Ruspini's tincture for the Teeth.—Florentine iris root, eight ounces; cloves, one ounce; rectified spirit, two pints; ambergris, a scruple.

Scouring Drops.—Oil of turpentine perfumed with essential oil of lemon peel.

Solomon's Balm of Gilead.—An aromatic tincture, of which cardamoms form the leading ingredient, made with brandy. Some practitioners have asserted that cantharides enter into its composition.

Steer's Opodeldoc.—Castile soap, one ounce; rectified spirit, eight ounces; camphor, three and a half ounces; oil of rosemary, half a drachm; oil of origanum, one drachm; solution of ammonia, six drachms.

Taylor's Remedy for Deafness.—Garlic, infused in oil of almonds, and coloured by alcanet root.

FRIEND WALKER.

The following curious Letter was written by Dr. Walker, who accompanied the British expedition into Egypt, for the purpose of extending vaccine inoculation.

"John Walker to Friends Pemberton, Hewit, and Gibson.

"Health and peace be multiplied unto you. Inasmuch as I intend to sojourn for awhile in the land of Judea, and having already a companion to go with me thither, who is an inhabitant of Bethlem Judea; I turn you to request that you will commit to remembrance, that any letter sent for me to that ship of the king's, which is by interpretation called the "Thunderer," and whose sign is the "Eagle of Jupiter," will be likely to reach me in whatever part of my journeying it may be. The letters I sent to Joseph were directed to the care of the wife of him who commanded this ship, and may yet be in her keeping; if so, it will be pleasant unto her if ye call on her, and take them into your charge. Farewell.

"Written at Rosetta, on the 18th day of the 6th month, in the 41st year of the king, when his armies came from afar, from the east and from the west, and encompassed Cairo about; together with the armies of the Arabians and the Egyptians, and the Syrians and those that dwell in the land round about the Hellespont, and in the isles thereof, from the river even to the going down of the sun in the Adriatic. And behold the fall of the city; will it not be shortly written in the chronicles of the king, and also the world shall hear the report thereof?"

GENUINE ANECDOTE. A short time since, a respectable medical practitioner, not a hundred miles from Ludlow, was called up in the night by a labouring man, residing at a few miles distant, to attend his wife, who was in child-bed. Mr. W. who had often attended under similar circumstances without obtaining any remuneration, asked the man who was to pay him. The countryman said he possessed five pounds, which, kill or cure, should be his reward. Mr. W. consequently paid every attention to the poor woman, who, notwithstanding, died under his hands. Soon after her death, Mr. W. met the widower at Ludlow, and observed that he had an account against him. The man appeared to be greatly surprised, and enquired for what? On being informed, he replied, "I do'nt think I owe you any thing; did you cure my wife?" "No, certainly, (said the accoucheur,) it was not in the power of medicine to cure her." "Did you kill her then?" asked the countryman. "No, I did not," was the reply. "Why then," said the countryman, "as you

did not either kill or cure, you are not entitled to the reward," and walked away.

A BLACKSMITH SURGEON.—Mr. Cheselden, who is well known as having been Surgeon to the Queen of George the Second, going into an obscure country town, found a blacksmith, who, with the best intention and utmost confidence, was in the habit of performing the operation for extracting the cataract. Pleased with his talents, Mr. C. took pains to instruct him, and at a future time enquiring what had been his success, the man replied, "Ah, Sir, you spoilt my trade, for after you explained to me what I had been doing, I never dared try again."

MILITARY PROMOTIONS.

War Office, Feb. 14th, 1823.

Hospital Staff.

Assistant Surgeon David Jugurtha Law, from half-pay 82nd Foot, to be Assistant Surgeon to the Forces, *vice* du Heaume, who appointment has not taken place.

To be Hospital Assistant to the Forces.

Hospital Assistant John Dixon from half-pay, *vice* W. H. Voysey, who exchanges.

Acting Hospital Assistant James Pemble Mackey, *vice* Allen, deceased.

BIRTHS.

On the 13th inst, the lady of Dr. Spurgin, of Guildford Street, of a Son.

MARRIAGES.

On January 16th inst, at St. Dunstan's, Stepney, by the Rev. Edward Williams, James Alexander Gordon, M. D., of Finsbury Square, to Hariet Melward, eldest daughter of Nicholas Charrington, Esq. of Mile End.

NEW PUBLICATIONS.

LIFE OF THE LATE DR. JENNER.

We have authority from the relatives and trustees of the late Dr. Jenner, to state, that in conformity with his wishes, they have applied to Dr. Baron, of Gloucestershire, to write the account of his life, and to arrange for publication the numerous manuscripts of that distinguished character; and that all the documents in possession of the family, are to be entrusted to Dr. Baron's care. From that gentlemen, therefore, the public may expect an authentic work, as speedily as his professional avocations will allow to prepare for the press, the ample and interesting materials with which he is to be furnished together with those which he himself accumulated during a long and confidential intercourse with Dr. Jenner, and many of his most intimate friends.

Preparing for the Press, and will be published early in the ensuing spring, a Translation of "PRECIS ELEMENTAIRE de Physiologie par F. Magendie. Tome 2nd;" which, with the First Volume of the work, already translated, will form a complete Treatise on Physiology; comprising many new and valuable discoveries recently made in this important branch of Medical Science. This volume will be rendered additionally interesting by the annexation of Notes, extracted from the Physiological Journal, and other works by the same author.

NOTICE TO CORRESPONDENTS.

We thank Philo-Medicus for his suggestion; which we had, and still have in contemplation, but shall be glad, if, in the mean time, he can contribute towards the subject he advises. In allusion to the stamp duty, we are inclined to think Philo-Medicus has been mis-informed.

D. D. has been received, and will be strictly preserved until it be enquired for; as, being too personal, we cannot take up cudgels that might ultimately fall upon our own heads.

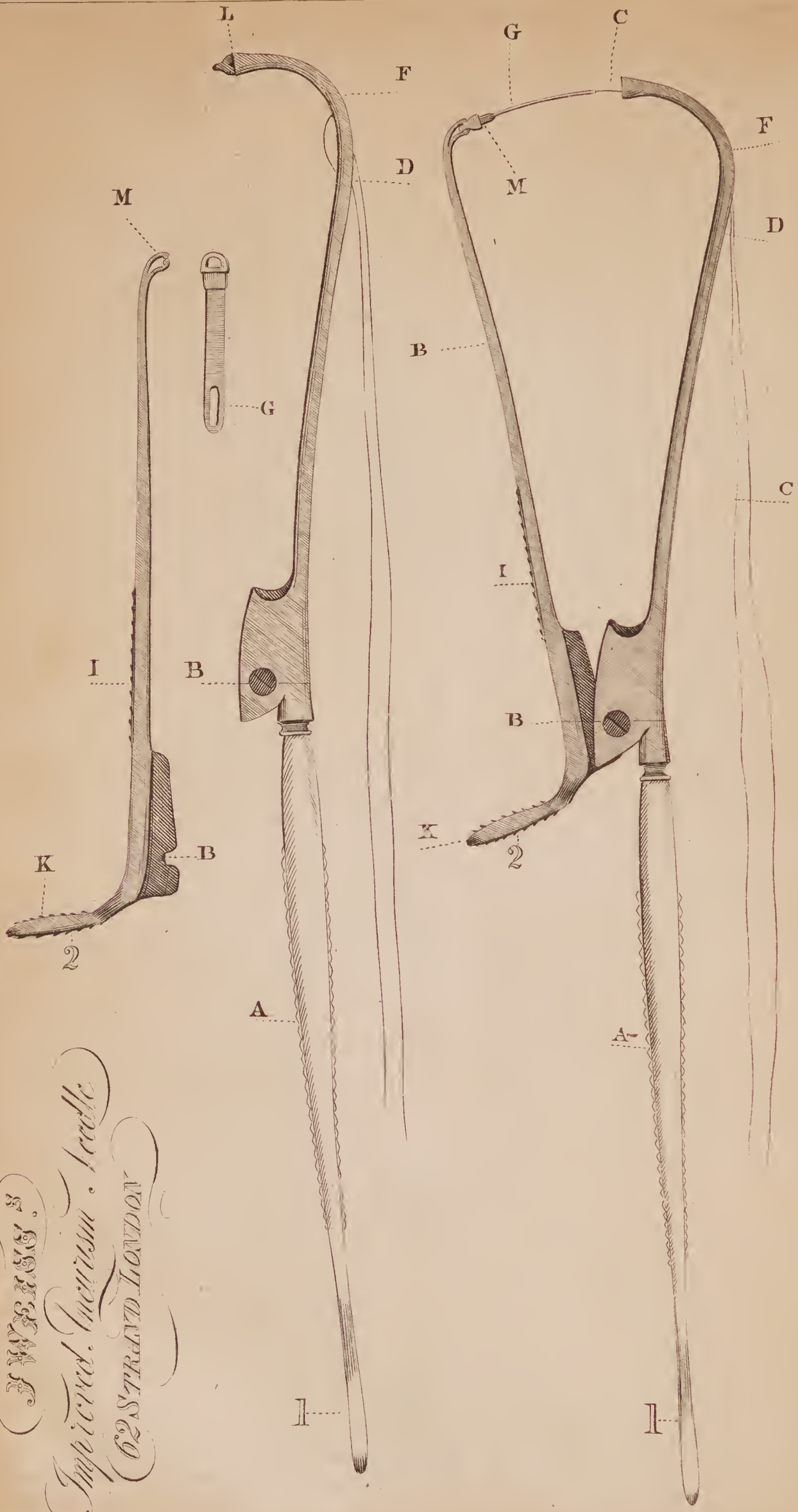
The article signed "A Clergyman," is better adapted to the order he may belong to, than our columns, although containing many excellent and praiseworthy observations.

Free translations from the Physiological Work of MAGENDIE *are in a state of preparation; as well as select extracts from* BICHAT *and* BECLARD, &c., expressly for this work.

All Letters &c. (Post Paid,) addressed for the Editors, at the Publisher's, &c.

Printed by Plummer and Brewis, Love Lane, Eastcheap;

Published by Cox and Son, St. Thomas's Street, and 39, High Street, Southwark. Sold also by Sherwood, Neely, and Jones, Paternoster Row; Simpkin and Marshall, Stationers' Court; Callow and Wilson, Prince's Street, Soho: John Cox, Berner's Street, Oxford Street; W. Stewart, South Bridge Street, Edinburgh; and Hodges and M'Arthur, Dublin.



Imperial Anatomical Museum, Leeds
62 Strand London

THE WEEKLY

MEDICO-CHIRURGICAL & PHILOSOPHICAL MAGAZINE.

No. IV. SATURDAY, MARCH 1, 1823. *Price* 4*d*.

"FLORIFERIS, UT APES, IN SALTIBUS OMNIA LIBANT
OMNIA NOS, ITIDEM, DEPASCIMUR AUREA DICTA."

OUR attention this week has been drawn to several late improvements and inventions in surgical instruments, an account of which, from time to time, accompanied with accurate engravings, we purpose to lay before our readers. For many of these the profession stands indebted to MR. WEISS, of the Strand, and particularfy for his improvement on a new aneurism needle, suggested by Mr. Kirby, an eminent surgeon in Dublin, (of which the annexed plate presents a faithful delineation) for the purpose of passing a ligature round a deep-seated artery. And, in no case does this instrument appear better adapted, than in a well marked aneurism of the axillary artery, where the clavicle is much elevated—a circumstance rendering the operation extremely tedious and perplexing, as well as harrassing to the patient, in consequence of the difficulty of passing the ligature round the vessel. In these cases the instrument in question appears peculiarly suited, and claims a decided preference, in our opinion, over any other hitherto invented for the same purpose. It has already been used with success in subclavian artery; and, as far as it is known, generally approved of by the profession. We subjoin the following letter, for the further information of our friends, from Mr. Travers, who used it so lately as the 17th ultimo, which leaves us little, if any thing, to say on the subject.

New Broad-street, January 18, 1823.

SIR,

I think it due to your ingenuity to inform you, that I yesterday applied a ligature twice to the Subclavian Artery above the Clavicle, with your Aneurism Needle, and found its application easy and entirely satisfactory in each instance. Whatever be the result of the Operation, which unforeseen and difficult circumstances render very doubtful, I feel it my duty to state that your Needle removes a difficulty, which every operating Surgeon has complained of in his attempts to noose the deep seated Arteries, and that I should be at a loss to name any modern example of the application of a mechanical contrivance to Surgical purposes, so happy in point of simplicity, and effect, or so promising in point of usefulness.

I am, Sir,
Yours obediently
B. TRAVERS.
Surgeon to St. Thomas's Hospital.

To MR. WEISS.

EXPLANATION OF THE PLATE.

A (1) the Needle which has a hole in the end of it marked L, where the end of the spring marked G must be introduced, the ligature to be put through the hole marked D on the outside of the Needle; the same end of the ligature must be again put through that end of the hole marked F, where the hole in the spring will come, which will make the ligature lie on the outside of the Needle, as in the plate. You must particularly observe that the spring is to be pushed quite home to

the shoulder near the eye, then introduce the Needle thus threaded under the Artery, and next take the second part of the instrument marked (2) and lead it down into the joint B till it drops into the screw. Then press the finger on the rough part of the instrument marked I, when the point marked M will be found to catch hold of the eye of the spring to which the thread is attached.

Take hold, with the finger and thumb, of that part of the Instrument marked K and press it downwards, which process will be found to draw out the spring and with it the ligature. When the spring and ligature are drawn out, the best way to clear the one from the other is, to cut the ligature away at both ends from the instrument. In order to free the spring from the second part of the instrument after the operation, it will be necessary to pull them not directly one from the other, but to give the instrument a half turn to the right in dislodging it from the spring.

BIOGRAPHY.

MEMOIR of the LIFE and WRITINGS of JOHN GORDON, M. D. F. R. S. E.; late Lecturer on Anatomy and Physiology in Edinburgh, by DANIEL ELLIS, F. R. S. E. &c. &c.

JOHN GORDON, M. D. was the third son of John Gordon, Esq. of Edintore, Wine Merchant and Banker in Forres, and was born in that town on the 19th of April, 1786. After receiving the first rudiments of domestic education, Dr. Gordon was placed under the tuition of Mr. Shand, a teacher of considerable eminence, then residing at Forres, but, at present, Rector of the Academy at Tain. Under this gentleman he began to study the Latin language in the Grammar School of Forres, in November 1793, when he removed to the university. On his arrival in Edinburgh, he resided with his eldest brother, the late Robert Gordon, Esq. W. S. who, in every thing that related to his welfare and improvement, manifested on all occasions, the anxiety of a father. Having entered at the university, he prosecuted his classical studies under the late Dr. Hill, and Mr. Dalzel, who, at that period, filled respectively the chairs of humanity and greek. At the same time, he began the study of mathematics under the late Mr. Laidlaw, well known as an able and successful teacher; and with him he continued about two years.

Being destined to the profession of medicine, he had the good fortune to commence his studies in that science, under the auspices of Dr. Thomson, Professor of Military Surgery in this university, with whom he became an apprentice in 1801. "In that capacity" says Dr. Thomson, "he continued to prosecute, under my direction, his general and medical studies for a period of four years. While serving with me, he had the good fortune to have for his fellow-apprentices, several young men, eminently correct as himself in moral conduct, equally anxious to distinguish themselves by diligence in study, and to merit my approbation by a strict attention to their duties. In the discharge of the multifarious little offices which young men, in the situation of apprentices, have to perform, no one has ever appeared to me to possess, in an equal degree with Dr. Gordon, the power of executing what was intrusted to his care. The performance of his duties never seemed to give him any trouble; and nothing could exceed the punctuality with which they were discharged."

Soon after this period, Dr. Gordon began his attendance on the medical classes in the university; and he farther availed himself of the other opportunities of medical instruction which the school of Edinburgh affords, by attending, in succession, the Lectures delivered on Anatomy by Dr. Barclay: on Surgery by Dr. Thomson; and on chemistry by the late lamented Dr. Murray: men who, by their labours and writings, have largely contributed to uphold the reputation which Edinburgh, as a medical school, continues to enjoy. During this period too, Dr. Gordon became a student of natural and moral philosophy, the former taught at that time, by the late Mr. Robison, and the latter by Mr. Dugald Stewart.

In the year 1803, Dr. Gordon was elected a member of the Medical Society—an institution highly favourable to the development of talent, and contributing, in no ordinary degree, to that inquiring disposition, and independent mode of thinking on medical subjects, which have ever been leading characteristics of the Edinburgh school. This Society arose out of a private meeting of medical students, who, so far back as the autumn of the year 1734, assembled, at first once a fortnight, to read an Essay, written by one of its members, on some subject connected with their studies. Of these students Dr. A. Russel, the natural historian of Aleppo, and Dr. George Cleghorn, author of a well known work on the Diseases of Minorca, were among the most distinguish-

ed. The following year, viz. 1735, Dr. John Fothergill and Dr. Cullen became members of it; and thus this private meeting laid the foundation of the Medical Society, which became more formally incorporated the year after, and has flourished ever since to the great advancement of medical science in this University.

In this Society, all subjects connected with medical science are submitted to the freest discussion, without any other reserve than that which the necessary rules of debate impose. The prevailing opinions in medicine are canvassed with the utmost freedom, and the students may be said often to sit as jurors on the doctrines even of their teachers. If the confidence and inexperience of youth sometimes betray into error, it is likely, at least, to be less permanent than that which results from the timidity and prejudice of age. Hence it has happened, that opinions and theories in medicines have been gravely delivered from professorial chairs long after their fallacies had been detected, and their principles abandoned by those to whom they were addressed. 'At the establishment of the Medical Society,' says a venerable member of that body, 'the system of Boerhaave maintained in Europe a sway as universal as that of Galen had done before. But the founders of this Institution, while they were far from being the least sensible of the high merit of so great a master, did not hesitate to shake off a blind veneration for his errors. Reason, philosophy, and experiment were their constant, and their only guides. By these means, by such men, and in this place, were the foundations of the Boerhaavian doctrine first shaken.' Of these men, the most distinguished was the illustrious Cullen, who embraced early the doctrines of Hoffman, and, in the year 1755, when he succeeded to a Medical Chair, first publicly taught them in this University, at a time when the system of Boerhaave still subsisted in its full and entire force. At a still later period, Dr. Cullen himself advanced a system which superseded that of his great predecessors; and again, in this Society, this new system, even during the lifetime of its author, first encountered that opposition which made it "totter to its fall"—a fate which shortly overtook the system of Brown that had supplanted it, and for a time bore almost undisputed sway. In the proceedings and discussions of this society, Dr. Gordon distinguished himself as well by his knowledge and ingenuity, as by the ease and gracefulness of his elocution. He read before it, at different times, the allotted number of dissertations; all of which exhibited that patient research and discriminating judgment which marked his subsequent efforts.

Dr. Gordon's studies were originally directed with the view of his filling a medical station in the service of the East India Company. In prosecution of this plan, he went through the usual examinations, and obtained a diploma from the Royal College of Surgeons of Edinburgh in the spring of 1805; and on the 24th of June of the same year, he proceeded to the degree of Doctor of Medicine in the University.

(To be continued.)

PHYSIOLOGICAL OBSERVATIONS.

Observations on the effects produced by the bile, in the process of digestion; By B. C. Brodie, Esq., F. R. S. *Professor of Anatomy and Surgery, to the College of Surgeons, &c.*

The following are some of the experiments relating to the uses of the bile, mentioned in the Lectures of this gentleman, delivered in the Theatre of the Royal College of Surgeons, during the last spring; being part of a series relative to the function of digestion.

"Various opinions have been entertained by Physiologists respecting the office of the liver. Some have supposed that the secretion of bile is merely excrementitious; others, that the secretion of bile is intended to stimulate the intestine, and to produce a ready evacuation of the fœces; and another opinion has been, that the bile is poured into the duodenum, that it may be blended with the chyme, and, by producing chemical changes in it, convert it into chyle. The situation of the liver, connected as it is in every instance with the upper part of the alimentary canal, is unfavourable to the first of these hypotheses; but the last is rendered very probable by the circumstance of chylification taking place just at the part where the bile flows into the bowel. In order, says Dr. B. that I might arrive at some satisfactory conclusion on these points, I applied a ligature round the choledoch duct of an animal, so as completely to prevent the bile entering the intestine, and then noted the effects produced on the digestion of the food which the animal had swallowed, either immediately before or immediately af-

ter the operation. The experiment was repeated several times, and the results were uniform. Before I describe these results, it may be proper to make one further observation. The application of a ligature round the choledoch duct, is easily accomplished, and with very little suffering to the animal; so that any derangement in the functions of the viscera, which follows, can not reasonably be attributed to the mere operation. The division of the stomachic ropes, or terminations of the eight pair of nerves on the cardia of the stomach, and the ligature of the whole extremity of the pancreas, are operations of much greater difficulty; yet it has been ascertained, that neither of these interfere with the conversion of the food into chyme, or that of the chyme into chyle. When an animal swallows solid food, the first change which it undergoes is that of solution in the stomach. In this state of solution, it is denominated *chyme*. The appearance of the chyme varies according to the food. For example, in the stomach of a cat, the lean or muscular part of animal food is converted into a brown fluid, of the consistence of thin cream; while milk is first separated into its two constituent parts of coagulum and whey, the former of which is afterwards re-dissolved, and the whole converted into a fluid substance, with very minute portions of coagulum floating in it. Under ordinary circumstances, the chyme, as soon as it has entered the duodenum, assumes the character of chyle. The latter is seen mixed with excrementitious matter in the intestine; and in its pure state ascending the lacteal vessels. Nothing like chyle is ever found in the stomach; and Dr. Prout, whose attention has been much directed to the chemical examination of these fluids, has ascertained that albumen, which is the principal component part of chyle, is never to be discovered higher than the pylorus. Now, in my experiments, which were made chiefly on young cats, where a ligature had been applied so as to obstruct the choledoch duct, the first of these processes, namely, the production of chyme in the stomach, took place as usual; but the second, namely, the conversion of the chyme into chyle, was invariably and completely interrupted. Not the smallest trace of chyle was perceptible either in the intestines or the lacteals. The former contained a semi-fluid substance, resembling the chyme found in the stomach, with this difference, however, that it became of a thicker consistence in proportion as it was at a greater distance from the stomach: and that, as it approached the termination of the ileum in the cœcum, the fluid part of it had altogether disappeared, and there remained only a solid substance, differing in appearance from ordinary fæces. The lacteals contained a transparent fluid, which I suppose to have consisted partly of lymph, partly of the more fluid, part of the chyme, which had become absorbed.

I conceive that these experiments are sufficient to prove that the office of the bile is to change the nutritious part of chyme into chyle, and to separate from it the excrementitious matter. An observation will here occur to the physiologist. If the bile be of so much importance in the animal œconomy, how is it that persons occasionally live for a considerable time, in whom the flow of bile into the duodenum is interrupted? On this point it may be remarked,—1st., that it seldom happens that the obstruction of the choledoch duct from disease is so complete as to prevent the passage of the bile altogether; and the circumstance of the evacuations being of a white colour, may prove the deficiency, but it does not prove the total absence of bile. 2ndly., That in the very few authenticated cases, which have occurred of total obliteration of the choledoch duct in the human subject, there has been, I believe, always, extreme emaciation, shewing that the function of nutrition was not properly perform-

ed. In my experiments I found that the more fluid parts of the chyme had been absorbed, and probably this would have been sufficient to maintain life during a limited period of time.

In the prosecution of this enquiry, a circumstance occurred, which seems not unworthy of notice, although not immediately connected with the subject of digestion. The ligature applied round the choledoch duct was always a single silk thread, the ends of which were cut off close to the knot. If the animal was allowed to live he became jaundiced. The *tunicæ conjunctivæ* of the eye were tinged with bile, and bile was seen in the urine. But at the end of seven or eight days, I found, in several instances, that an effort was made by nature to repair the injury done by the operation, and to restore the passage of the bile into the intestine. In these instances, in destroying the animal at the end of the above-mentioned period, and exposing the cavity of the abdomen, and then making an opening into the duodenum, I ascertained that on compressing the gall-bladder, the bile flowed out of the orifice of the choledoch duct in a full stream, in spite of the ligature. On further dissection, I found that a mass of albumun, (coagulable lymph) had been effused, adhering to the choledoch duct above and below the ligature, and to the neighbouring parts, and enclosing a cavity in which the ligature was contained. The pressure of the latter had caused the duct to ulcerate, without adhesion of the surfaces having taken place, which had been brought into contact; and the ligature, having been separated from it by ulceration, lay loose in the cavity formed by the albumen which had been effused around it. Into this cavity the bile might be made to flow from the upper orifice, and out of it into the lower orifice of the choledoch duct; and thus the continuity of the canal intended for the passage of the bile was restored. It is still more remarkable that the same thing happened even when two ligatures had been applied on the choledoch duct at some distance from each other.

The physiologist will not fail to observe the difference between the effects produced by a ligature applied to an excretory tube and a ligature applied to an artery or vein. A circumstance nearly corresponding to that which I have now mentioned, has been noticed by Mr. Travers, respecting the consequences which follow the application of a ligature round the intestine.*

On the Morbid Influence of the Spinal Nerves; by R. P. Player, Esq.

The following are the results of the further observations on the morbid connexion existing between the origin of the spinal nerves, and the diseases of parts to which they are distributed, by the same author.

1. In almost every disease of the upper and lower extremities, of the neck, and of the trunk and its organs and viscera, preternatural tenderness may commonly be discovered on pressure between the vertebræ from which the nerves emerge which proceed to the affected parts, or those spinal branches which are more immediately connected therewith. 2. In diseases in which the circulation is much accelerated, in cases of disease affecting important organs, and more particularly when occurring in old age, this symptom may frequently be discovered to extend along a considerable portion of the vertebral column. 3. Diseases of the head, and its organs, and of those to which the par vagum is distributed, appear primarily to be connected with, if not consequential on, this morbid state, of one or more parts of the spine. The effects of remedies directed to the spine, seem to prove this. When organization is impaired, effects then become causes. 4. In many diseases besides the existence of preternatural tenderness about the origins of the nerves which proceed to

* See an enquiry respecting the process of nature in repairing injuries of the intestine.

the affected parts, this symptom may also be discovered about the origins of one or more of the intercostal nerves on the left side of the spine beneath the scapula, and opposite the upper portion of the stomach. 5. In diseases of females this symptom may, in like manner, be frequently found about the origins of some of the sacral nerves. 6. By the employment of remedies at these parts, some of our most obstinate diseases may be rendered comparatively tractable. For instance, *pain*, in general, may be almost immediately relieved; and the symptoms of gout, rheumatism, phthisis, and cancer, more effectually controlled than by any other means I am acquainted with. 7. The principal remedy is the abstraction of blood in a quantity proportionate to the vascular fullness of the patient. General bleeding being premised, when requisite. 8. Cupping is generally the best mode of removing vascular fulness from the origins of the spinal nerves; this must be repeated according to the recurrence of symptoms or the chronic nature of the case. The glasses should be much larger than they are usually made. Blisters, and similar remedies, become proper, after the due depletion of blood. 9. A recent fit of the gout may be cured by a single abstraction of blood proportionate to the plethoric state of the patient; but in this disease the origins of the intercostal nerves opposite the stomach will commonly require to be relieved as well as the origins of those which proceed immediately to the affected part or parts. 10. With this precaution, not only the phænomena of gout, but their cause also, appears to be removed; and if organization has not been impaired, the constitution to be completely relieved. 11. In cases of gouty affection of the stomach itself, the abstraction of blood from, or a blister applied over, the origins of the affected intercostal nerves, as the case may require, gives speedy and complete relief. 12. The preceding diseases are only adduced as examples of the advantage of directing remedies to the spinal brain, and to the origins of the nerves which proceed to affected parts; and to excite attention to the extensively beneficial application of which this practice appears capable in the relief and cure of diseases in general; but it is by no means intended to recommend it to the exclusion of other remedies. 13. Works on Pathology and Physiology, furnish numerous cases and experiments which tend to prove that pain and disorganization, as well as impaired function and paralysis, are consequent on causes which interrupt the due transmission of nervous influence to the affected parts. It has been very justly remarked that nature is sparing of causes, but profuse of effects.

Heads of Lectures *on Ulcers, with Remarks and Observations thereon, by* Mr. John Abernethy, Sir Astley Cooper, Sir E. Home; *&c. &c. &c.*

(Concluded from Page 40.)

Sores often occur in the lower extremities, from diseased viscera, and are generally accompanied with anasarca: in these cases it is necessary to attend to the state of the bowels, as no cure will take place before they are restored to their proper function. When these sores are attended with anasarca, calomel united with squills, and about half a grain of gamboge, will be found very efficacious; also the cathartic extract; giving at the same time digitalis with bark twice a day; as tonics are highly proper during the employments of evacuants. Sores are also found in the lower extremities, attended with disquamation of the cuticle and abraded skin; under the cuticle a small quantity of serum is found, arising from a lax circulation of the parts. There are two remedies for this disease; namely, the liq. calcis, with hydrarg. muriat., in the proportion of one grain of the former to an ounce of the latter, to be applied

by means of linen dipped into it, and laid upon the sore, over which a piece of oil skin is placed to prevent the linen from being too suddenly dried; and over the whole a roller, which should extend from one end of the limb to the other. Should the parts become irritated by this wash, the nit. argent. will be found an useful application. There are other obstacles to the healing process, such as a white and callous state of the edges of the sores; in these cases the ung. hydrag. is to be applied; and, should this not succeed, it will be useful to scarify the edges with a lancet. Blistering ointments have also their use as stimulants. When the edges curve inwards, it has been observed that it is a state generally attendant on scrophulous sores. The lime water and nitrate of quicksilver made into a wash, in the proportion of ʒj of the former to ʒss of the latter, is to be used twice a day; and afterwards the liq. calcis alone as a constant lotion; keeping up the strength and constitution with tonic medicines. When the edges of the sore turn *outwards* it generally indicates a cancerous tendency. We sometimes meet with sores rather of an uncommon nature, being attended with a great deal of pain, and yet little or no inflammation is present. These are to be treated with dilute nitrous acid, to stimulate them to produce granulations; giving the decoction of sarsaparilla at the same time; and applying the adhesive strapping on Mr. Baynton's plan, to cause the skin to elongate over the sore by the cicatrizing process. This variety may not improperly come within the meaning of what are called idolent ulcers. The plan adopted in most hospitals in town in the treatment of indolent ulcers, is to foment and poultice at first, and after granulations have formed, to apply the adhesive plaster, roller, &c.

There are ulcers with a specific action, such as scrophulous, venereal, cancerous &c., for their treatment the diseases, of which they are a consequence, may be consulted.

HOSPITAL REPORTS.

Guy's, Feb. 21st.

Operations. By Sir A. Cooper.

Amputation above the knee, from extensive ulceration in front of the tibia.

A large fungoid tumour removed from the fore-arm by a dextrous piece of dissection, without injuring any of the nerves communicating with the fingers, &c.

Schirrus tumour of the breast removed in a married woman (age 35.)

OBSERVATIONS ON THE DISEASES OF THE BREAST, &c.

The breast is subject to a variety of tumours, and not confined, as formerly supposed, to one; known under the name of schirrus.

Among these are the HYDATID, where there are a number of little bags or cysts formed. The first appearance it presents, is a tumour on the part, occurring in people of apparently good health; unlike that of a cancer, in the constitution being little affected. It appears at first about the size of a pea, and yields on pressure, but is elastic and returns to its former size when the pressure is removed. In this state there is but little, if any pain: it begins often at different parts of the breast at the same time, and the intermediate space is not affected; this, however, does not last long, as the whole breast soon partakes of it, &c.

A SCHIRRUS STATE OF THE BREAST frequently commences with a sanious oozing from the nipple, with great uneasiness in moving the arm backwards, which puts the pectoral muscle on the stretch. Its distinguishing marks are a stony hardness to the feel—perfectly circumscribed, distinctly felt in its whole extent, and limits unconnected

with other parts—moveable at first, being attached either to the pectoral muscle or integuments—pain not constant, but attacks all of a sudden, and with such violence, that the patient compares the sensation to a hot iron applied to the part. It is not confined to the breast alone, but extends along the axillary plexus of nerves—and as the tumour increases in size, it adheres to the skin, which becomes puckered and assumes the appearance of a cicatrix. The cellular membrane sometimes partakes of the disease, when the whole breast feels of a stony hardness; from which it would appear, that cancer extends beyond the glandular parts. The glands in the axilla soon become enlarged—some of these, on opening the part, have commonly been found enlarged, although not one of them could be detected externally: the glands above the clavicle, at the union of the jugular and subclavian veins, are also commonly diseased. The disease then proceeds towards the intercostal muscles, and below the cartilages of the ribs.

In true schirrus, inflammation is attempted, but it does not last long—a purple tract round the tumour forms, which bursts; and granulations are seen springing up, but different from those of other parts, from their uniform irregularity—deep depressions are seen in some places; in others, projections like fungus shoot out from the rest. In this state of the disease the pain is not only more constant but more severe, although not very tender to the touch, and the application of dressing the part excites but very little sensibility, &c. &c. &c.

The Operation for the removal of the breast is so simple, that any detail of it here would be superfluous. It is not always expected to prove successful—affections of the mind and visceral disease are, not unfrequently, fatal to it. When these are known to exist, it is enjoined as an invariablerule not to perform this operation; equally so, when the axillary glands are much enlarged, consequently diseased, as it has not been found to be attended with any benefit.

There is another disease to which the breast is subject, and even more frequent than schirrus; called Fungus Hæmatodes. In dissecting this tumour after removal, it is discovered, that there is more disease in its substance than in schirrus. The first appearance it presents is a small cluster, swelling like a sponge distended with no great quantity of fluid, yielding on pressure, but returning again to its former size. It has not that marbly hardness which characterises schirrus; and this, with the want of pain, distinguishes it from the latter.

There are several other diseases of the breast; one in particular, termed an Irritable Tumour, which has often, but erroneously, been mistaken for cancer. It often occurs in young women of sanguine temperament, more frequently before than after marriage, and in those who have not had children from the age of seventeen to twenty-one, &c.

This disease is distinguished from schirrus; first, by its exact limits not being observable, *i. e.* where the tumour ends and the glandular substance begins, which is the reverse in schirrus; and secondly, by an extreme tenderness to the touch, from the slightest pressure, and this not only for the moment, but prolonged for hours afterwards; yet there are no marks of external inflammation, or redness of the skin, &c. This disease is capable of being remedied; but from the want of a knowledge of the case, it is often unnecessarily the subject of removal.

It is from the cure of this complaint that certain practitioners have arrogated to themselves the skill and credit of having cured cancerous affections; although it is well known to practitioners of experience and respectability, that hitherto no remedy has been met with, capable of eradicating a true cancer.

Tartrite of antimony in pulmonic inflammation†.

Our professional brethren in this country have very generally been sceptical as to the large dozes of certain powerful medicines, especially of emetic tartar; exhibited by the Italian Physicians. We have lately seen several English medical men, who were eye witness to these administrations, and they confidently assert, *first*, that the medicines were of the usual strength, and *secondly*, that these large doses did not produce those effects which we would be led to expect from their comparative magnitude. We all remember that when the East India proprietors first prescribed scruples or half drachm doses of calomel, the *facts* were denied by some in this country, because the *effects* were not what they hypothetically considered they should be. They are now less incredulous on this subject, and therefore we should not be entirely sceptical as to the practice of our Italian brethren, who have ears, eyes and brains as well as ourselves.

The writer of the paper before us resides in the Canton de Vaud, where inflammatory affections of the chest are very frequent and severe. For several years past he has given up all sanguineous deplition and counter-irritation in the treatment of this class of complaints, and trusted entirely to large doses of emetic tartar. He exhibits, for instance, from six to twelve or fifteen grains in twenty-four hours, dissolved in a six ounce mixture, of which he gives a table spoonful every two hours, a copious draught of a common laxative ptisan. If there occurred much tendency to persipration, he adds Sp. Æth., Nit. 2 drachms; and where there was much uneasiness and insomnium, a drachm of the tincture of opium was added to the mixture. The quantity of emetic tartar was generally encreased three grains daily, till the patients took twelve or fifteen grains per diem; a quantity which he has rarely had occasion to exceed. The following were the usual effects of the medicine. The patients generally vomited after the second or third doses of the first mixture, and afterwards it either acted on the bowels, or produced no other sensible effect than that of mitigating quickly the symptoms of the disease. The patients generally expressed themselves as very much soothed about the chest, and when the usual doses were delayed, they complained of not being so well. "I have to remark," says our author, "that large doses of the tartrite produced much less vomiting than small doses which always give rise to great distress without beneficial results." In the greater number of cases this mode of treatment did not require more than eight days: it was rarely prolonged to a fortnight. In a few cases a blister was applied to the painful part, but neither local nor general bleeding was ever used. No case of pulmonic inflammation terminated fatally in our authors hands since he commenced this method of treatment.

† M. Peschier. Revue Med. Aug. 1822.

Elongated uvula. Dr. Physic and the Editors of the Philadelphia Journal of Medical Sciences desire to draw the attention of their professional brethren to a species of consumption, in many instances of a very formidable character, produced by the irritation of an elongated uvula, and which is relieved by simply cutting off a portion of it. Whether such a circumstance might give rise to a disease of the larynx, we cannot say, but we have seen three instances within the last twelve months where the relaxed uvula, by keeping up a constantly tickling cough, rendered the patients very uncomfortable; indeed very unwell. In two of the cases, the complaint was subdued;

though tediously, by styptic and stimulating gargles: in the other case the tip of the uvula was snipped off by a pair of scissors, and the patient was quickly cured.

In the same journal we are informed that the superacetite of lead combined with opium is pretty freely exhibited in America for several affections of the bowels, especially the cholera infantum and dysentery. To an adult they give half a grain to a grain of the lead with five drops of the tincture of opium every hour or two, according to the urgency of the symptoms. In some instances, where it was desirable to act upon the skin, small doses of ipecacuan were added; occasionally the medicine was omitted, and purgatives exhibited.—*Quarterly Periscope.*

The following observations on schirrus are from the Lectures of the late Dr. Else.

Amputation of the breast is a very easy operation, and yet attended with bad success; being generally resorted to in cases of schirrus and cancer, two stages of the same dreadful disorder. There first appears a hard moveable tumour attended with shooting pains—the skin over the part becomes red and inflamed—it at length breaks out into ulcers which cannot be healed—the patient sinks under the discharge, which is then ichorous and watery—and hæmorrhage ensues from the dilated vessels. This disease seems absolutely incurable. The cancerous tumour may be removed, but the taint remains in the habit, in the same manner as a chancre may be removed, without the disease, of which it is a consequence, being cured. Extirpation of the affected parts does not cure, but only palliates the disorder. Cancer has been attempted to be cured by a caustic, made with arsenic (prepared by Justamond.) Many cases are, however, mistaken for cancer. A poultice of flour, honey and oil has long been found of service as an application. The carrot poultice cleans the wound, but there is no instance of its having cured cancer. It will be best to vary the applications every fortnight, or three weeks. The patient should be kept cool—the belly lax, and the skin perspirable. Mr. Else never attempted the operation without reluctance. If it is ever to be performed, it should be done as soon as the schirrus tumour appears, while loose, and before the lancinating pains begin, as the matter seems then not to be absorbed; but it may indeed sometimes be attempted, when these pains have commenced. From the appearance during the operation, we may form some judgment whether disease be likely to return. If the vessels are not much dilated, so as to render the hæmorrhage inconsiderable, it is longer before it returns, and *vice versa*, indeed the wound seldom closes. At first it heals well, until it become contracted to about the size of a sixpence, when it again shews its cancerous disposition. When it adheres, it is advanced too far to expect any success from the operation, even if the whole tumour could be extirpated. A swelling of the axillary glands is another strong objection to the operation, not on account of dissecting out the glands, but from the habit being affected. If the tumour be small, a simple incision will be sufficient, otherwise a section must be cut out of the skin, &c. of which, however, as much should be saved as possible, without embarrassing the operation. The incision through the integuments should first be completed, before the tumour is begun to be dissected, as the pain will be much less to the patient, the skin being the most sensible part—the wound will be more regular and the parts looser, consequently more easily cut away—the remainder of the operation is mere dissection. The general rule of preserving as much flesh as possible, must not be regarded here; on the contrary, a considerable portion must be removed, that we may stand the better chance of removing the

schirrous parts. It is sometimes necessary, during this operation, to take up a number of blood-vessels, and sometimes not. Although amputation of the breast is a most disagreeable and dangerous operation, nevertheless, when the complaint is not very old, and the patient much desires it, and where there are any hopes of cure, it should be performed. Practitioners are now agreed with regard to cicuta, that in cases of cancer it relieves only by its anodyne qualities; and I believe it never has cured a true cancer. Some have pretended to cure this disease by means of caustic applications; by which many unhappy patients have been tortured, and ultimately destroyed, amidst the most poignant suffering. This mode of treatment is now disapproved of and disowned. Toads were formerly thought to cure cancer; and many other equally ridiculous and disgusting applications were at one time in vogue. The appearance of cancer is never to be depended upon. It appears, adds Mr. Else, to be a disease existing in the blood, and if it be at all to be cured, I believe it must be by internal medicines. In some constitutions it may be necessary to indulge the patients, when the radical cure is not to be expected, in any food they may desire.

---

*Compound Fractures.**—The general practitioners in the country are treading close on the heels of the exclusive surgeons in town. There is a far greater spread now than formerly of medical and surgical information among all ranks of the profession, and they are become bolder and more successful in their practice. The pages of our own Journal have contained ample proofs of this—and the Medico-Chirurgical Transactions owe no small proportion of their contents to this valuable class of medical society.

Mr. Dunn is favourably known to the profession by a paper in a late volume of these transactions, containing a case of the removal of several of the tarsal and a part of the metatarsal bones followed by complete success. The present communication records two cases of compound fracture, in which the limbs have been saved by a similar removal of large portions from the middle of the cylindrical bones—and one of simple fracture, in which a projecting portion of bone was sawn off with equal success. Of these cases we shall present our readers with a succinct analysis.

On the 17th of March, 1821, John Harper, a lad of fourteen years of age, was thrown from his horse, and while one foot hung in the stirrup, the horse went off at full gallop. The consequence was a dreadful fracture of the right leg—"the broken ends of bone projecting from a wound of immense extent, and a portion of the tibia detached, which he (Mr. Hagyard) removed." Mr. Travis and Mr. Dunn arrived by candle-light—

"And found the poor lad in a small and wretched hovel, extended on a couch, with a large wound, and destruction of the skin of the middle of the leg; the upper portion of the tibia projecting like a stick, unconnected with any of the soft parts, and deprived even of its periosteum, to the extent of between two and three inches, and the lower portion denuded of all covering to the length of three-fourths of an inch. The fibula was also fractured near the knee, and in the centre of the leg, so that it was divided into three pieces. It was, however, so connected with the surrounding parts, that the spiculæ of bone could only be discovered by the insertion of the finger into the wound. The teguments on the posterior part of the limb, although much bruised, were not deadened; and the circulation could be distinctly traced along the course of the posterior tibial artery. A considerable hæmorrhage took place at the moment of the accident, but it was now suppressed.

* Observations on compound fractures, by John Dunn, Surgeon, Scarborough. Med. Chir. Transactions, Vol. xii.

The wound was six inches or more in length, and as many in breadth; but the boy was comparatively tranquil. On consultation, the grand question was, whether to amputate the whole member; to put it up in splints as it was; or to saw off the denuded rough extremities of the tibia, and treat it as an ordinary compound fracture. In this dilemma, which required immediate decision, we determined upon the last expedient. The tourniquet was therefore applied, the broken ends of the bone raised from the wound, and whilst the limb was held steady by one, and a bone knife kept under the exposed portion of the tibia by another of my friends, I successfully amputated the two extremities of the fracture, including about three inches of the whole cylinder of the tibia. We were unable to reach the fibula with any instrument, so that the two portions of the tibia could not be brought within an inch and a half or two inches of each other, without projecting the spiculæ of the former into the surrounding muscles." 169.

Stitches were passed through the edges of the wound and their sides drawn as near as convenient, when strips of adhesive plaster were applied round the limb, with an eighteen tailed bandage and splints. The patient went on favourably—the wound became so covered with granulations that the bones were no longer discoverable. On the 1st of May the report was—"the sinuses diminished; the space between the bones filled up with solid matter; by compressing it on each side I could trace a continued line of bone." By the 26th of October the boy was walking about the streets.

While we give Mr. Dunn every credit for his judgment and prompt resolution, in the above case, and while we most fully approve of the practice which he adopted, we venture to differ from him on certain physiological points—and this difference, we have stated in our review of Sir Astley Cooper's work on Dislocations; we, need not, therefore, repeat it here.—See page 633.

The second case related by Mr. Dunn, is that of a lad, sixteen years of age, who was stricken, on the middle of his leg, by a great plank of wood. Both the tibia and fibula were fractured. The ends of the former protruded from a very long wound, above half the length of his leg, having the appearance of a clean cut. The ends of the bones were very ragged —the most forcible extension could not place them in coaptation. It was, therefore, determined to saw off their extremities with the common amputating saw—No hæmorrhage of consequence followed—the wound was cleaned, and the bones put in apposition. About half an inch of the exterior part of the tibia was left denuded of its periosteum, but the rest of its circumference was connected with living parts. The leg was properly dressed, and the boy was judiciously treated. In four or five months the patient could walk without crutches.

The third case was the removal of a projecting edge of the tibia, after a badly united former fracture. These cases are very creditable, as we before observed, to Mr. Dunn, and to provincial surgery in general. *Med. Chir. Review.*

Extraction of a living fœtus from a dead mother.*

It so rarely falls to the surgeon to have an operation of this kind, that we cannot resist giving the following a place among our collection.

On the 15th of April, 1820, a woman in the last month of pregnancy was run over by a stage coach near the end of St. Thomas' Street, Southwark. She was immediately conveyed to St. Thomas' Hospital, and expired in twenty minutes after the accident. Mr. Green and Dr. Blundell, after a short consultation, agreed on the propriety of the cæsarean section, which was performed in less than a quarter of an hour from

* Mr. Green, Med. Chir. Trans. Vol. xv.

the death of the mother. On extracting the child it exhibited no signs of life. The umbilual cord was tied and divided; a tracheal pipe introduced, and the lungs inflated. After fifteen minutes artificial respiration, the child shewed symptoms of returning life. The infant was then immersed in warm water, but the pulse diminished in force and frequency, and the breathing became embarrassed. It was now dipped in cold water without any marked effect. After a time the breathing became natural, and in thirty-two minutes the child opened its eyes. It was taken by the friends to a house in the neighbourhood, and put under the care of a wet nurse. On the visit next day, it was found that little nutriment had been taken, that the child had not cried, and that its breathing was embarrassed. The infant lived but thirty-four hours after emancipation from the womb of its unfortunate mother. On opening the body of the latter, it was discovered that the liver was rent through its substance by the crush of the wheels of the coach, and much blood extravasated in the abdomen.

This case, as Mr. Green observes, affords a proof that a fœtus may be recovered, if promptly extracted from the uterus, when the mother has been killed by violence; and this too, under the unfavourable circumstances of death, accompanied by a profuse hæmorrhage. The case detailed is creditable to the zeal, humanity, and ability of the two distinguished practitioners concerned.

Inflammation and Retroversion of the Uterus.—Dr. Robertson, of Glasgow, has detailed two or three interesting cases, in the Edinburgh Journal, where pain and intumescence, or inflammation of the uterus, in the unimpregnated female, appeared to produce a kind of retroversion of the organ, accompanied by a state of great suffering. The first case, however, is rather equivocal, and some people may still look upon it, as Dr. Robertson did, at first, himself, to be in some way connected with utero-gestation, though evident discharge of a blighted fœtus could not be perceived. The second case is less exceptionable, and we shall give some account of it.

Dr. R. was called to a young girl, nineteen years of age, and found her resting on her knees and elbows, weeping from pain. Ten weeks previously, she had been delivered of a still-born child, and had had a good recovery. Two days before the present visit, her calls to make water became very frequent, without any known cause. (Ever since her confinement, however, she acknowledged that she made water more frequently than formerly.) She now felt a dull uneasy weight in the loins, with slight pain in both groins. Her pulse was quick, feeble, even tremulous—pain in the umbilical and hypogastric regions, apparently agonizing—urine and fæces lately evacuated—no menstruation since last confinement. Sixty drops of laudanum were ordered, followed by a dose of castor oil and calomel. This was productive of temporary relief and sleep; but next morning she was as bad as before—principally complaining of her pubes, back, and groins—of frequent micturition and inclination to stool, the latter accompanied by much bearing-down pains. On examining *per vaginam*, Dr. R. found the uterus very low down, and enlarged, as nearly as he could guess, to about the bulk of one's fist, "the fundus being directed backwards into the hollow of the sacrum, while the mouth, which was tumid and much indurated, was felt facing the lower edge of the symphisis pubis." The whole body of the womb was so tender, that she screamed when the most trifling pressure was made on it. Her pulse was quick, small, and more feeble than hard. During the night, she had been attacked with frequent vomiting. Veneseetio ad ℥viij. which produced fainting. Fomentations and opium were then used to allay the pain. Pills, composed of calomel and opium,

were next administered, with the view of reducing the bulk of the uterus. Leeches were also applied to the vagina and labia pudendi. On the 4th day from the commencement of the pills, the gums became tender. The uterus now felt somewhat flaccid—the tenesmus and dysury, in two days more, had almost subsided. The pills were continued at proper intervals so as to keep up a trifling irritation on the mouth, and on the 16th day from the time our author first saw her, she was well—the uterus feeling light, buoyant, and of the natural size. The symptoms and mode of treatment, in this case, were nearly the same as in the other, which we shall not notice.

That the phenomena, in these instances, were to be attributed to a congested, or sub-acutely inflamed state of the uterus, we can scarcely doubt; and that this state of turgescence produced the malposition, or retroversion, as it is called, we think is not very improbable. These inflammatory affections of the uterus are more common than is generally imagined, and the antiphlogistic treatment, especially by local blood-letting, rest, horizontal position, semicupia, and abstinence, is not sufficiently attended to. A farrago of remedies, supposed to have some specific influence on the uterine system, are too often substituted by the routinist for this rational treatment.

Epilepsy.—In a well written paper on Epilepsy, in which Dr. Shearman advocates the doctrine of nervous, rather than *vascular* disturbance, as the first link in the causation of the disease, we find the following passage. "The medicine which, in my hands, has more frequently succeeded than any other in removing epilepsy, is the elutriated oxyd. of tin, given in the dose of from ℥ij to ʒj to an adult, night and morning, for about four days; at the end of that time giving a purgative, and again resuming the medicine or not, according to its effects upon the system, or its apparent power over the disease. That it possesses powers different from, and superior to other preparations of the same metal, I am fully convinced, and I think it deserves a trial by practitioners after they have been disappointed of success in the exhibition of other remedies." Knowing Dr. Shearman to be a man of correct judgment and strict candour, we offer the above passage to our brethren at large. *Med. and Chir. Review.*

MELANGE.

Experiments on Incubation.—M. Geoffroy Saint-Hilaire has commuicated to the Institute of France an interesting account of different methods by which oviparous animals may be rendered viviparous These experiments completely succeeded with regard to water-snakes (*couleuvres acquatiques*) when placed in a dry situation, and under circumstances unfavourable for dropping their eggs. These were retained by the parent, and preserved in the genital receptacle; so that, at the end of a certain period of this uterine incubation, the young came forth from the eggs and the body of their mother. These experiments were not followed with equally successful results in those animals whose eggs have calcareous shells. Notwithstanding his endeavours, M. Geoffroy has not succeeded in effecting the production of young chickens alive; but he is led, from his observations, to believe that this might be done by better contrived means.

Sympathy and Sensation.—Dr. Fodera, in a paper read before the Academy of Sciences, has endeavoured to establish a positive distinction between these two phenomena, which have been supposed to have their common origin in nervous sensibility. His opinion is, that sensations are always effected through the medium of the nervous system; whilst sympathies are more generally phenomena of vitality, and belong to all organized beings. They are effected by continuity of texture, and are altogether independent of the nerves. In this class of facts M. Fodera ranges the movements of plants and the different communications of living organs, whether in their functions or diseases.

Rudiments of a Fœtus in the Testicle.—Dr. Friedlander relates that a child was born in December, 1817, at a village near Glogau, which at first appeared in all res-

pects healthy and natural. In the month of May following, it was seized with difficulty in making water, and the right testicle began to enlarge. By the 19th of June, a ligature was applied near the ring, which came away on the 22nd, and the child did well. The testicle was four inches three lines (Rhine measure) in length, two inches four lines in breadth; its weight, seven ounces; the epidydimis was entirely wanting. After careful examination of the tunica vaginalis, a hard body was perceived, which proved to be an os femur, eighteen lines long, and without periosteum. Several other bones were subsequently found, connected, by means of cellular texture and muscular fibres, in such a manner as to form the pelvis and right lower extremity of a fœtus about four months old. The left branch of the os pubis and os ischium were wanting; the ileo-femoral articulation presented a triangular appearance; the sacrum was distinct, with its surface for receiving the first bone of the spinal column; in the middle of the pelvis was a ligamentous mass about an inch long, resembling the rudiments of the lumbar vertebræ. The tibia and fibula were naturally formed; the interosseous ligament "a little too thick."

Several cases of this kind are on record in the works of Meckel, Dupuytren, &c.; and, in confirmation of the above, it may be mentioned, that it was observed by C. Dietrich, at Glogau, a doctor, counsellor, and man-midwife!

Croton Tiglium.—A letter from Mr. Thomson, of the East India Company's service, dated Dinapore, 16th January, 1822, contains the following passage:—"One of the seeds, (of the croton) reduced to powder, and made into two or three pills with a little pepper, forms the most common purgative used by the natives of this part of India. It acts speedily and powerfully; but I suspect, if not conjoined with some aromatic, it will occasion much griping. We now use it pretty frequently, combined with ginger, and, since the receipt of your letter, employ the expressed oil with similar results. The latter, given in a dose of one drop, almost always purges with considerable activity; but it must be taken in some mucilaginous vehicle, for it will blister the tongue and fauces when taken by itself. I have given as much as ten drops at once, which induced instantaneous vomiting, followed by purging, but no other bad consequences ensued. In doses of three or four drops, it acts quickly and powerfully, emptying the bowels of their contents, and generally produces eight, ten, or a dozen evacuations. In certain habits and complaints, I conceive, it will prove an excellent purgative, and, from its cheapness, may be introduced with advantage into hospital practice. *** When applied externally as a liniment, it produces a profuse crop of small pustules on the part, which may render it of service in certain chronic complaints. I have not yet, however, had sufficient opportunities of ascertaining all its medicinal properties.

Operation for cleft Palate.—Roux has lately succeeded in removing this deformity in a young man, who had a natural division of the velum pendulum to so great an extent as to almost entirely deprive him of the power of articulation. By means of an ingenious operation, resembling that for hare-lip, M. Roux was enabled to bring the flap together, and procure their union in a favourable manner. He has already practised the operation, with similar success, in another case.

Metallic Titanium.—Dr. Wollaston has lately discovered that the small cubic chrystals of a metallic lustre and reddish colour, which are occasionally found in the cavities of the slags from iron furnaces, are pure titanium.

Result of the experiments made by order of the board of longitude, for the determination of the velocity of sound in the atmosphere. Drawn up by M. Arago.—The observations were made by a commission, consisting of M. M. Humboldt, Gay-Lussac, Bouvard, Prony, Mathieu, Arago, and Rieussec.

They have deduced from the mean of two days' experiments, on the report of cannons, measured as to their time of being heard, by excellent chronometers of M. Breguet, that at 10 ° c., the velocity of sound per second is 173,01 toises = 337. 2 metres = 1106. 32 English feet, estimating the length of the metre to be 39. 37079 english inches, as determined by Captain Kater. *Ann. de Chem. et de Phys.* xx. 211.

Sugar Cane Juice.—M. Vauquelin received some bottles from Martinique, containing the juice of the sugar-cane, it having been subjected to M. Appert's process for its preservation. In most of the bottles, however, a species of semi-transparent gum had been formed, which, when separated by alcohol purified and dried, became white, opaque, and of a slight sweet taste. This substance was very soluble in water, but formed a milky solution: it puffed up when heated, carbonized and emitted a smell like sugar or gum. It appeared nevertheless to contain a small portion of animal matter. By treatment with sulphuric acid it did not yield sugar; by nitric acid, it was converted into oxalic acid, and a yellow bitter matter, but no mucic acid was formed. When burnt, it left about one-hundredth part of ash, consisting of phosphate of lime, iron and silica. M. Vauquelin concludes that this substance was formed from the sugar, and

did not previously exist in it.—*Ann. de Chim.* xx. 93.

On the porosity of Glass and siliceous Bodies.—Mr. Deuchar in a paper on the occasional appearance of water in the cavities of crystals, and on the porous nature of quartz and other crystalline substances, which paper was read before the Wernerian Natural History Society, suggests that the crystals which are found to contain these portions of water were probably once hydrated, or rather, contained throughout their mass an excess of water, and that this fluid having afterwards separated from the crystals passed by capillary attraction either to the surface, or to any accidental *void* space within them.

Mr. Deuchar thinks it obvious that the water might pass through the crystals, not only from the porous nature of their particles, but also from their temporary display of rents during the application of a *high* temperature. It is supposed that all siliceous bodies, even glass, &c., are porous, and the author thinks that the filling of well-stopped bottles, when sunk to great depths in the ocean, depends on the water passing through the glass, and not through the materials used to stop the bottles, though these were only cork, sealing-wax, and oil-cloth. We would, however, refer our readers to the paper itself in the *Phil. Mag.* lx. 310., but wish at the same time to read one by Mr. Scoresby, in the *Edin. Journal*, vi. 115., also relating to sunken bottles.

DR. JENNER.

The following is the Epitaph to be placed on the tomb of this much lamented individual.

Within this tomb hath found a resting place,
The great Physician of the human race,—
Immortal Jenner! Whose gigantic mind
Brought life and health to more than half mankind.
Let rescued infancy his worth proclaim,
And lisp out blessings on his honour'd name;
And radiant beauty drop one grateful tear,
For beauty's truest friend lies buried here.

A PHYSICIAN'S HINT TAKEN.—Sir Richard Jebb used to tell a story of himself, which made even rapacity comical. I had it from the lady to whom he told it. He was attending a nobleman, from whom he had a right to expect a fee of five guineas;—he received only three. Suspecting some trick on the part of the steward, from whom he received it, he, at the next visit, contrived to drop three guineas. They were picked up, and again deposited in his hand; but he still continued to look on the carpet. His lordship asked if all the guineas were found. "There must be two still on the carpet," replied Sir Richard, "for I have but three." The hint was taken as he meant.—*Lætitia Matilda Hawkin's Anecdotes.*

OBITUARY.

On the 5th inst. at Broadwater, near Worthing, Arthur Robinson, Esq. M. D. aged 65, late of London.

On Wednesday last, in Curzon Street, Charlotte Isabella, eldest daughter of the late Dr. Fraser, of Lower Grosvenor Street.

NOTICE TO CORRESPONDENTS.

Z. Z. has been received, and is under consideration.

The article on QUACKERY *is not amiss of its kind, but the same ground has been so often beaten over, that the subject is much too stale for our present recapitulation. We deem it almost unnecessary to repeat that communications not immediately approved of, will be respectfully returned upon authentic application being made for them.*

We shall avail ourselves of the information promised us by " A PUPIL OF ST. BARTHOLOMEW'S*" whenever he may be pleased to address us.*

X. X. came too late for insertion this week, but as "fair play is a jewel," it will be given in our next.

We have arranged matters with respect to the different Hospitals, &c. in the metropolis, as to be enabled, in future, to lay before our readers the earliest details of important cases, and operations, with their results, whenever they may take place.

Erratum.--Observations on Schirrus, p.58, from the lectures of Dr. Else, by an oversight of the press, have been separated from those on the diseases of the breast, which it should immediately follow.

All Letters &c. (Post Paid,) addressed for the Editors, at the Publisher's, &c.

Printed by Plummer and Brewis, Love Lane, Eastcheap;

Published by Cox and Son, St. Thomas's Street, and 39, High Street, Southwark. Sold also by Sherwood, Neely, and Jones, Paternoster Row; Simpkin and Marshall, Stationers' Court; Callow and Wilson, Prince's Street, Soho: John Cox, Berner's Street, Oxford Street; W. Stewart, South Bridge Street, Edinburgh; and Hodges and M'Arthur, Dublin.

THE WEEKLY

MEDICO-CHIRURGICAL & PHILOSOPHICAL MAGAZINE.

No. V. SATURDAY, MARCH 8, 1823. *Price* 4*d.*

"FLORIFERIS, UT APES, IN SALTIBUS OMNIA LIBANT
OMNIA NOS, ITIDEM, DEPASCIMUR AUREA DICTA."

EXTRAORDINARY CASE OF HYDROCEPHALUS.

Vide Hospital Reports, Page 72.

The Ides of March, 1823.

WE are acquainted with the nature, substance and tendency of that description of periodicals called Reviews, but never till now did we see or hear of such a thing as a *hyper*-reviewer of the description "before us;" that is, a non-descript caterpillar, arrogating to itself the vapid and nugatory presumption of pilfering, *en masse*, "verbatim et literatim," the contents of the Edinburgh, and Medico-Chirurgical Quarterly Reviews, Medical and Physical Journal, &c.; and then dubbing itself an "Intelligencer," God save the mark! What does this remind us of but the Israelite brushing and patching up a second hand coat, which he has purchased for a "mere song," and palming it off, afterwards, for, in his own language, "one as *goot* as new, so help me *gat*." Now such *intelligence* as this, is little better, if not worse, than carrying coals back to Newcastle; for, in-

stead of transporting them to those places where they are most wanted, they are here thrown down again at the very mouth of the pit from whence they were "abstracted," to be trodden over and unheeded. So it is with the *soi-disant Intelligencer*, that entertains indeed, as we plainly see, but an indifferent opinion of the intellects of the better order of society, when *it* can thus presume to lavish its supercilious fulsomeness indiscriminately, though equally unnoticed and disregarded.

We know not better how to mark our derision of the silly, impatient elf, whose shallow brains induced *it* so wantonly, and so prematurely to attack the very first number, as soon as it appeared, of the WEEKLY MEDICO-CHIRURGICAL AND PHILOSOPHICAL MAGAZINE, than by comparing ourselves as far as regards this self-said Intelligencer, to a scare-crow in his way, at the very shadow of which he quakes for fear; or he, to us, like a yelping cur that cries out long before it is hurt. What then does this *intelligent* or rather this knowing pirate spout forth relative to the MEDICO-CHIRURGICAL AND PHILOSOPHICAL MAGAZINE? Why, in the first place, with his usual *sagacity* on these occasions, he has given, as large as life, the contents of our first number, without entering *en matiere*. Then, *pauvre diable!* he commences; aye! and upon our very first number too, without mercy, and without quarter, under false colours, to cut and hack us in every direction. In allusion to the substance of the first number of our Magazine, he observes;

"The above are the contents of the FIRST NUMBER of a NEW PERIODICAL which has been launched into the world since the publication of the last number of the *Intelligencer; we* wish *we* could say, with any prospect of adding to OUR *scientific knowledge:* (admirable pleonasm!) consistent with the objects for which the *Intelligencer* was *first instituted, we* have considered it *our* bounden duty to notice the work; and, although *we* are at all times much more anxious (friends and countrymen lend us your ears) to give praise to any labourer in the field of science, than to convey censure; *we* should be guilty of a dereliction of duty to our readers did *we* suffer to pass with impunity any work, *which strongly required condemnation*, (recollect readers! our very first number!) considering that "*judex damnatur* &c." of *this class* of publications, however, we *feel compelled* to say, belongs the work *before us.* (Bravo!) From the table of contents our readers will observe, that there are BUT FEW subjects contained in it, *which* have not *previously appeared* in other journals; from some of *which*, articles have been EXTRACTED *verbatim et literatim*, and without the slightest acknowledgement."

Here we must pause a moment to ask the "green-eyed monster" what articles he can boast of, that have not previously appeared in "other journals," and in a perfect, intelligible and unmutilated condition too, but which his unhallowed touch has so disfigured and bedaubed, that we can scarcely help, when we meet with them, or rather their shadow in the *thing* alluded to, bewailing their unhappy and destitute condition, in the light of an old friend reduced in the world from a condition of comparative respectability, to a state of the most abject indigence. This is *reviewing* what we never wish to behold; and in charity to mankind, the sooner this *intelligent* inquisitor suspends *its* tortures on the ill-fated Quarterly Reviews, &c., the sooner we shall deem him worthy of being noticed, in any manner, by the meanest of our contemporaries.

Now this Mister Intelligencer, whom, by the bye, we scarcely knew, till about a fortnight ago, to be in existence, with all the barefacedness of a callous countenance, thinks it a crime in us, forsooth, to nip off a little bit here and there to make up the fag end of our Weekly Magazine; a thing in fact, which, in our Prospectus, we avowed our intention of doing, as one of the features of

our undertaking; whilst, he himself, from beginning to end, is made up of NOTHING *but* the *scrapings and disfigurings* of the Journals before alluded to. What's all this for Mr. Intelligencer, who art but "a bad echo, and a GATHERER at most?" If this cracked sound of the Quarterlys, has done no more, he has at least told us, and probably without meaning it, that

> "None better guard against a cheat,
> Than he who is a knave complete."

This, Mr. Intelligencer, is an "ABSTRACT," or an "EXTRACT," if you choose, though rather a bitter one, yet no less at your service on that account.

"The only part," continues this *sapient reviewer*, in reference to our Magazine, "of the plan of the *journal* which appears to *us* to be deserving of approbation, and even that is rendered futile by the mode of its execution, is the head of HOSPITAL REPORTS. We have long been decidedly of opinion, that a periodical, destined solely, or even partly, to give some account, not of the *mere manual* part of the transactions at the hospitals of the metropolis *alone*, but of the various pathological and therapeutical facts which must be continually presenting themselves in these extensive storehouses of *morbid* derangements, would be possessed of the highest interest to every class of practitioners: such a work" observes the invidious viper, "is still a desideratum." This is more, without the least particle of malevolence, than we could venture to assert in support of any part of his monthly "ABSTRACTIONS," the utility or meaning of which, we have yet to learn.

After this piece of gratuitous pomposity, and mark ye readers! bestowed on OUR FIRST NUMBER; what should be our reply to such a farrago of *morbid consequence*, and preternatural anxiety evinced under every other corresponding symptom of half-stiffled jealousy, and premature, though probably not ill-founded alarm? We must again put a question or two to the MANUFACTURER of this periodical *luminary*. Has he read our prospectus? Will he inform us of any operation of importance having taken place in any public institution, which we have not recorded, and described as well as discussed, as far as our limits would permit, and the nature of the subject seemed to require? In short, what does *he* mean? Has the already half-scotched viper displayed the least particle of either judgment or liberality in his precocious attack upon us? an attack in all probability premeditated before we were "*launched*;"—no,—he has shewn himself illiberal, wanton and weak, and as such we despise him, as an ungenerous rival, or rather as one of the mongrel species, that likes to shew his teeth without either the power or the courage to bite.*

"Should the Editor," says he, "of the publication before *us*, be determined *to continue it in its course*, we *should* strongly recommend him to pay more attention to the orthographical part, which is so full of inaccuracies, especially in the proper names, some of which are *spelled in a different manner at different places*, and others *invariably incorrectly*, that no *literary character could possibly be satisfied with taking* it as an authority for any established fact, but would be under the necessity of referring to the source whence *it was* ABSTRACTED."

It is next to impossible not to detect the soil and genus of the scribe "before us," throughout the whole of this effusion; nor can we rest satisfied until convinced to the contrary, that he, the said *admirable critic*, and periodical freebooter is neither more nor less than some half-drilled, non-medical clod-hopper trying his rustic acumen up-

---

* To our numerous readers it must be agreeable to learn, but to the * * * * * * * * * * * it must fall like a *coup de foudre*, that we are exerting ourselves, with every prospect of success, to establish a correspondence in Edinburgh, Dublin, and Paris, independent of important information from all quarters, which we are already promised.

on us, but which, we trust, he finds already at a fault,—at least the style and tone are so much like the property of a "half bred one," that, we shall find no little difficulty in divesting ourselves of the possibility of the assertion, which we promise however not to retract, at least, till we see the *thing itself* in a more manly humour.

We shall now take leave of our *intelligent reviewer* for the present, reminding him, however, that should his little propensity stimulate him *di novo* to shew his *canines*, we shall take another of our rods "out of pickle," and switch him again to his heart's content.

In justice however to our impartial and numerous readers, we must acknowledge that, we should fall infinitely short of the urbanity and respect due to them, for their generous patronage, amidst all our faults, since the appearance of the Medico-Chirurgical and Philosophical Magazine in the literary horizon, were we to omit apologizing for an apparent inattention, not properly attributable to us; namely, that, in consequence of residing at some distance from the press, during the getting up of our first numbers, a few typographical errors, rather unimportant than otherwise, have inadvertently been overlooked by those whose immediate province it was to attend to them;—an occurrence, which, as far as depends upon ourselves, in future, is not likely to be repeated.

We beg leave once more, and once for all, to state, that, independent of our matter being of the choicest and most recent kind, our columns will ever be open to liberal and manly disputation and disquisition on all professional subjects. Moreover, regardless of the trembling and untenable inuendoes of our milk and water *reviewer*, our chief aim will be, among other equally vigilant and well-timed operations, to anticipate him, as we may deem fit, by culling under his very nose, and before he is well able to smell them, the most fragrant blossoms of medical literature, in all their various shapes and guises; at the same time, bearing in mind, that we are bound, by our earliest promise, in addition, to extract and concentrate weekly, the very spirit and essence of the "VARIOUS TRANSACTIONS OF LEARNED SOCIETIES, and of the QUARTERLY JOURNALS FOREIGN AND DOMESTIC," however painful it may prove to our staggering *reviewer* to contemplate such a laudable and desirable intention on our part, at so cheap and so convenient a rate.

We further presume to flatter ourselves, that, if we do possess any vanity, it consists solely in the ardent dedent desire of always rendering ourselves agreeable, and of course acceptable to every class of our readers, by a diligent attention to their various tastes and inclinations; and, although we are not so frivolous as to imagine that it will be in our power to place our labours, be what they may, beyond the reach of criticism, we hope, nevertheless, whenever it shall, in its legitimate course, vouchsafe to visit us, to come at the very least, within its more manly range.—Unmerited scurrility will always be repelled—candid remonstrance alone may merit our regard.—ED.

BIOGRAPHY.

MEMOIR of the LIFE and WRITINGS of JOHN GORDON, M.D. F.R.S.E.; late Lecturer on Anatomy and Physiology in Edinburgh, by DANIEL ELLIS, F.R.S.E. &c. &c.

(Continued from page 51.)

In conversations with Dr. Gordon about this period, Dr. Thomson found that he was by no means bent on going to India; and that, in his contemplation, the measure seemed to be a matter rather of necessity than of choice. From the opportunities he had possessed of witnessing the talents of Dr. Gordon, his more favourite pursuits, and the diligence which he displayed in the prosecution of them, it occurred to Dr. Thomson to suggest to him the idea of his becoming a lecturer on Anatomy and Physiology in Edinburgh. This idea he readily embraced, and at once set about endeavouring to persuade his friends to abandon the plan of his going out to India. So entirely

was he satisfied with this change of plan, and so eager to enter on the new career suggested to him, that he began immediately to study Anatomy, and practice Dissection, with the view of qualifying himself to teach that fundamental branch of medical science. The better to accomplish this object, he determined to spend a winter in London, where the facilities of studying practical anatomy are much greater than can be commanded here. He accordingly set out for the British metropolis in the winter of 1805; and having, as appears from his letters to Professor Thompson, visited all the great hospitals, and made particular inquiries respecting their establishments for dissection, his choice for the study of Anatomy, was fixed on the Theatre in Great Windmill Street, to which Dr. Baillie and Mr. Cruickshank formerly gave celebrity; and which, at this time, was under the able direction of the late Mr. Wilson. "These dissecting rooms," says he, "seem so well supplied with subjects, are apparently so comfortable and the pupils are so much to my mind, that I have resolved to become one of the party." Of these pupils, many were his countrymen and acquaintance; and with them he prosecuted his anatomical studies with unwearied assiduity. He always estimated highly the instruction he had gained and spoke even of the pleasure he had received, from attendance on Mr. Wilson's Lectures. In a letter dated Februnry 1806, he says to Professor Thompson,—"Mr. Wilson has given an interest to osteology of which I could hardly have conceived it susceptible; and his lectures on the muscles and their actions, with which he is now occupied, are very far superior to any thing on that subject I have ever heard or read." No greater praise can be rendered to a public teacher than that of imparting interest to those parts of his lectures which are the least susceptible of it; and the student who can be thus pleased with the least attractive portion, is in the best disposition to derive the greatest improvement. In this school too, Dr. Gordon became acquainted with Mr. Brodie, then acting as demonstrator in Mr. Wilson's rooms, and with that distinguished physiologist he continued ever after to cultivate an intimate correspondence. At the same time he attended lectures on Comparative Anatomy by Dr. Macartney, whose subsequent removal to Dublin has contributed so much to the rising reputation of that University, as a medical school.

But, although chiefly devoted to anatomical pursuits, during his residence in London, Dr. Gordon's letters show that no subject connected with medical literature, or the practice of medicine or surgery, escaped his notice. He details information of every kind, and describes many important operations which he had witnessed by the eminent surgeons attached to the different hospitals of the metropolis. He returned to Edinburgh in the summer of 1806, and, through that summer and the succeeding winter, prosecuted with great zeal his preparatory studies for the duties he was about to undertake.

In November 1806, he was elected one of the Annual Presidents of the Medical Society—a distinction that is commonly desired with earnestness, and for the most part fairly bestowed, by a free election, on those best entitled to the honour. In this office, I had the good fortune to be associated with him, and the increased intercourse which, in consequence, arose between us, soon ripened an occasional acquaintance into a sincere and permanent friendship. The circumstance too of my having cultivated a small portion of that field of science in which he exerted himself with so much ardour, served to increase the interest we took in each other's pursuits, and to multiply the occasions of bringing us together. He who has himself been engaged in the doubts and perplexities of original inquiry, can best estimate the value of a friend, ready, at all times, to hear with patience, and discuss with candour, the yet immature views presented to him;—to correct with delicacy what may be erroneous—with honesty to suggest what may be deficient—and zealous to approve that which may be just and true. Such was the friend I had found in Dr. Gordon, and such too, alas! is the one I have lost by his death.

(To be continued.)

PHYSIOLOGICAL OBSERVATIONS.

On Vomiting. (Translated from the French expressly for this Work.) Being the substance of a Memoir, by M. MAGENDIE, read to the first class of the *Institut*; followed by a report to the same class, by MM. Cuvier, Humbolt, Pinel, and Percy.

Occupied for a length of time in making experiments relative to the mode in which emetic substances act upon the animal œconomy, I have had frequent opportunities, and under very different circumstances, to observe the act of vomiting. After examining this phenomenon with considerable attention, it struck me that the current ideas relative to it were not very correct. And, as vomiting is of too much importance in physiology, and particularly in medicine, not to merit a scrupulous investigation, I be-

came eager to set myself right on the subject, and to relieve myself of the uncertainty in which its modus operandi seemed involved. It was with this view that I undertook the following series of experiments, the principal results of which I am now about to have the honour of submitting to the enlightened judgment of the class.

A very abridged history of the various opinions that have reigned relative to the mechanism of vomiting is indispensable to the intelligence of the facts I have to communicate.

Until towards the end of the 17th century, Physiologists and Physicians agreed in considering vomiting as the effect of a convulsive contraction of the stomach; but during the last fifteen years of this century, and the first half of the following, several learned men professed to view the subject in quite an opposite light. According to them, the stomach, during the action of vomiting, is entirely passive, whilst the abdominal muscles and diaphragm are the essential agents.

P. Chirac, a Physician of Montepellier, appears to have been the first who proposed this doctrine: he expresses himself on the subject in the following manner, in a letter addressed to Emmanuel Kœnig, Augsburg, 1686.*

"I made, within the last few days, an experiment which evidently appears to me to prove that vomiting is not produced by the contraction of the stomach. I gave a *gros* of sublimated mercury in a piece of bread to a dog, which he immediately threw up again. This was followed by extraordinary nauseous efforts, which he continued to make, in order to vomit. Under these circumstances I made an incision in the abdomen by cutting the recti muscles in a longitudinal direction, that I might observe what was going forward during this time in the stomach; but I perceived nothing extraordinary there. The movement of this viscus was even scarcely perceptible, and so feeble that, although it was empty (for I had taken the precaution previous to making the experiment to keep the dog fasting) it was impossible for its peristaltic motion, such as it then was, to produce a contraction of one twentieth part of its size, which appeared to me absolutely indispensible to enable it to empty itself by either of its orifices. Nausea nevertheless continued, and the dog still made violent efforts to vomit. I then stitched up the integuments of the belly, leaving only a small opening, into which I introduced my finger, to observe, by the feel, the state of the stomach. But during the very time of the vomiting efforts, I felt no contraction in its fibres; it only seemed to be flattened by the motion of the diaphragm, and the compression of the abdominal muscles that compressed it. I repeated these experiments several times, by sometimes laying the lower belly open, and sometimes sewing up the incision, with the exception of a small opening large enough to admit the finger; but I always observed the same thing, neither did I perceive that the fibres of the stomach made any contraction capable of procuring an evacuation either by the superior or inferior opening."

Senac (1) Baccacus, (2) a physician of Geneva, Van (3) Swieten, Schulze (4) Schwartz, (5) and several other learned men, adopted, at least fundamentally the opinion of Chirac; but they likewise met with unbelievers. Litre, for example, denied that many people vomit very easily and without any effort of the abdominal muscles.*

The Academy of Sciences saw well that it was not by arguments that an

* Ephémérides de l'académie des curieux de la nature. Dec. 11, ann. iv, 1686, obs. 125.

1. Essais de Phys., p. 116.---2. *De Feb. intermitt.*---3. Comment. tom. ii. p. 153.---4. *De Emesi.*---5. *De vomit, et motu intest.* Ludw. 1745. in 4to.

* Academie des Sciences, hist. 1700.

opinion founded on facts could be destroyed; they were also desirous of examining a thought which, to use the expression of their Secretary, became attractive by the name alone of the author of a favourable prejudice.

The celebrated anatomist Duverney, member of the Academy, who also participated in the opinion of Chirac, and who had several times repeated his experiments, undertook to make them over again before the society, and to shew *the whole mechanism of vomiting*, by means of them; but two of the experiments that were attempted were not sufficiently elucidated, and the academy not being able to spare longer time to these investigations, they trusted to the observations that M. Duverney might make more at his leisure.

In all probability these observations were favourable to the opinion of Chirac; for Lieutand, in a Memoir read to the Academy of Science in 1752, in which he violently declaims against this opinion, speaks of it as if it had been generally adopted: "It is, sayshe, "a prejudice which has seduced both the learned and the ignorant;" and some lines farther on he adds, "but shall it be suffered for me to inscribe myself falsely against an opinion that has been received without examination, and with an eagerness difficult to be accounted for."

Nevertheless, after having spoken in this manner, Lieutand confines himself to combatting the opinion of Chirac rather by argument than fact. Thus, in his opinion, "the stomach is placed too deeply to be compressed by the abdominal muscles. If it sometimes depended solely upon the contraction of the abdominal muscles and diaphragm we could vomit at pleasure. Vomiting cannot take place during inspiration, for then the œsophageal orifice is shut by the compression of the pillars of the diaphragm. If vomiting took place during inspiration, nothing could prevent the matter vomited from getting into the glottis. When the stomach is paralysed, vomiting can no longer take place," and other similar objections.

Lieutand's Memoir, written with spirit, and containing an interesting pathological fact, of which he knew well how to take advantage, must have made, and in fact it did make, a strong impression.

The learned and laborious Haller likewise declared against the opinion of Chirac: he says in the great physiological work, that vomiting is peculiar to the stomach; that it can take place independent of all contraction of the abdominal muscles and diaphragm;* he even goes so far as to describe two kinds of contractions, which, in his opinion, take place in the stomach during vomiting.

"The first, says he, "is exercised by the circular fibres; it begins at the duodenum, shews itself afterwards at the pylorus, and is successively continued to the cardia until the matter, which should be vomited, passes into the œsophagus: this is the antiperistaltic motion.†

"The second kind of contraction depends upon the oblique fibres which proceed from the œsophagus to the stomach: by it the anterior surface of this viscus suddenly approximates the posterior, causing a certain noise to be heard."

The ideas entertained by Haller in vomiting were, as may be seen, intimately connected with his doctrine of irritability; but they had principally for their support, 1st. Two experiments in which Haller says he distinctly saw the second kind of contraction just mentioned.—2nd. Several experiments made by Wepfer, in which this author equally affirms that he saw the stomach contract at the time of vomiting.

These experiments are detailed in this author's excellent dissertation on the cicuta aquatica.‡

(To be continued.)

---

* Tom. vi. p. 282.

† Tom. vi. p. 281 et 282.

‡ Sed etiam alium motum in ventriculo vomentis animalis vidi in quo pars anterior ad posteriorem accessit, succussu quodam et quadam crepitatione.

HOSPITAL REPORTS.

EDINBURGH ROYAL INFIRMARY.

March 4, 1823.

By a letter just received of this date, from one of our correspondents, we are informed, that a tumour was removed last week, at this Infirmary, by that skilful operating surgeon, Mr. Liston, in which were included the testicles and penis, weighing 41 lbs. The operation was successfully performed, though not unattended with danger from hæmorrhage. But, as our correspondent observes that he did not witness the operation himself, he is prevented, for the present, from stating any further particulars connected with it. We hope shortly, however, to be enabled, through the same channel, to give a faithful and particular description of the case itself, with the result of this important and rare operation.

An Operation also for femoral hernia was performed; the subject a female, aged 42. The symptoms calling for the interference of the knife in this case were extremely urgent; strangulation having existed (according to her own account) three days. No unfavourable symptoms had made their appearance when our informant's letter went to the post; and therewas every prospect of perfect success. The portion of intestine and hernial sac were but little changed from their natural appearance, presenting only a slightly dark colour.

On the same day, at the same place, a cancerous tumour was removed from the breast of a middle aged woman.

LONDON HOSPITAL. MARCH 5.

OPERATIONS.*

Amputation of the right leg (male subject) below the knee, by Mr. W. B. Harkness, assistant surgeon.— *Particulars, if any, in our next.*

* *All cases and operations of importance, carrying with them any notable practical points; as well as their results, &c. will never escape our notice. This is a department to which particular attention will be paid; but in the absenee of such interesting matter, we earnestly request our candid readers to attribute it to the right cause.*

ST. THOMAS'.

EXTRAORDINARY CASE OF CHRONIC HYDROCEPHALUS.

THE subject of our Plate this week is in Henry's Ward, St. Thomas' Hospital; viz., James Cardinal, aged 28 years, the son of a late surgeon of that name, at Coggeshal, Essex. It appears that the head, in this case, has continued to encrease in size since infancy, to its present dimensions, (36 inches in circumference over the hair,) without any inconvenience to the patient, until within the last three or four years, when he became subject to fits, which have since continued at intermediate intervals. With the exception of these, he is otherwise in good health; complains of no uneasiness about the head, unless it be after the epileptic paroxysm; has a good appetite: we believe that no particular diet or medical treatment is assigned to him by the surgeon, (Mr. Green,) whose patient he is. An excellent cast of the head is in the Museum of the Royal College of Surgeons; and another at St. Thomas'.

This variety of Hydrocephalus (essential chronic, at least we believe it to be so) is still but little known, although it is not very rare, and described in the writings of some of the best authors. In the writings of Tulpius, Wepfer, Bonnet, Valsalva and Lieutand, there are several accounts of serous congestions slowly accumulated in the natural cavities, on the surface, or in the substance of the brain, and which, although presented under different denominations, evidently belong to the Hydrocephalus in question. And, if more striking specimens are wanted in order to shew its greatest degree of developement, three others may be found in Fabricius de Hildanus, and one in Vesalius. These four observations are remarkable for the enlargement of the cranium at a time when the ossification of that part is more or less complete. Children, who

are the subjects of it, and born without any malformation, are attacked with Hydrocephalus about the age of two, three, five, and seven years. Their heads by degrees fill with water, and become of a monstrous size, not merely from the separation of the sutures, but owing to the developement and breadth of the bones of the head themselves. This means of enlargement even suffices with one of them for the augmentation of the head, which acquired in the space of fifteen years, the time the disease continued, a circumference of two feet ten inches. The crania, which in all three were opened, presented the brain converted into a membranous cyst, and yielded a very abundant quantity of water, amounting in one to eighteen pounds. The head of the latter, if Hildanus may be credited, was upwards of an ell in circumference. There are some similar facts to be met with in "*les Ephémérides des curieux de la nature*," as well as in other places. But no author appears to have been better acquainted, or to have oftener met with this description of Hydrocephalus, than J. L. Petit, as the description given of it by him to the Academy of Sciences in 1718, evidently proves. It is rather astonishing that Fothergill who was so long and so advantageously engaged in investigating acute dropsies, did not inform himself better from all these observations, so as to perceive the point of contact that connected them to those he had collected.

Whytt nevertheless had already pointed out the important differences that dropsy of the ventricles may present in its course, by recognizing that it often continues long, is slow in its progress, has an obscure beginning, and that it is then several months in forming. He quotes the example of a child in whom Hydrocephalus was attributed to the measles, ten months before its appearance, which left the child in a great state of debility. It is from not being acquainted with this variety of Hydrocephalus, that Fothergill refused to acknowledge the examples, cited by Whytt, as true instances of cerebral dropsy, and to which he invariably assigns an acute stage, included in the course of two or three weeks.

Chronic essential Hydrocephalus appears to have been well known by John Warren, who, in a Memoir (in 1788) inserted in the London Journal of Medicine, called the attention of physicians towards this variety of it, which he characterised by the two following features, viz.—*little or no cephalalgia; feeble and languishing condition of the individul attacked with it.*

Our limits will not permit us to enter further into the description of this variety, as given by authors, nor its complications, causes, prognostics, treatment, &c. we shall content ourselves therefore for the present with the following short account of its progress, duration, and post mortem appearances of the cranium, &c.

No determinate progress or duration can be assigned to chronic Hydrocephalus. From what has been said, some idea may be formed of the irregularity of its progess and the protraction of its duration, particularly when the fluid, having exercised upon the encephalon a gradual compression, is able to stretch in its turn the parietes which enclose it, as may be seen in the case above alluded to; and, by the description given of it by Petit, who seems only to have considered that kind of Hydrocephalus with dilatation of the bony parietes of the cranium. The bones of the cranium, adds he, grow thin, become soft, take on irregular forms, the nose sinks in, the forehead is raised, the eyes seem to be bursting out of the head, which becomes monstrous, and of an insupportable weight. It sometimes bursts open, after which the patient dies. On opening the cranium, I have found the dura mater adhering more firmly to the bones of the head than usual; the basis of the brain flattened and crushed, and the ventricles so considerably deseended that the cincritious and white substances were not two lignes in thickness, &c.

ANATOMY.

Mr. Abernethy has privately circulated a very sensible paper on the subject of the recent punishment of purveyors of dead bodies for the dissecting-rooms, about which so much more noise has been made than was necessary.—"All foreigners express astonishment when informed that the teachers of anatomy in this country are obliged to depend, for the power of communicating this most necessary and important knowledge, upon a precarious supply of bodies, which have been suffered to become putrid, and afterward been interred. This indeed is a national disgrace; and formerly I would not willingly have acknowledged the fact of the disinterment of bodies, because it tends to disgrace the best feelings of the public. The newspaper writers however have so blazoned it forth, as to render any attempt to conceal it unavailing. Still I would beseech these worthy gentlemen, nay, indeed, even magistrates in general, to consider, 1st. the necessity of the case; and 2ndly., that the act is uninjurious if unknown. It only becomes injurious in consequence of its promulgation, and therefore its detection, as much as possible, ought to be suppressed.

The good sense of this advice is apparent. Not one instance in a thousand would be made known, were not magistrates and newspaper reporters alike neglectful of the interests of science; the one in not evading as much as possible the infliction of severe punishment on "our friends," and the other, in reporting cases which never ought to appear in print at all; which, indeed, it is a duty to suppress. The feelings of the living would be less often wounded, were not attention kept alive on the subject. The benefit of dissection to the living is beyond all calculation, and the real injury inflicted on living or dead is nothing. The mixture of the remains of human beings with the soil of the church-yard, is rapidly effected. A decayed coffin is quickly broken up to make room for a new one, sometimes in a few month's space; and whether the sexton prematurely mangles with the spade, or the surgeon with the knife, it is much the same thing. The feelings of the heart, will, however, long and naturally so continue to revolt at the thought of the violation of the tomb of a relative, and reason will, perhaps, never be sufficiently powerful to overcome them; but how often have they been unnecessarily made to do so! The question is one which is of infinite consequence to the real welfare of the living. It is one where natural feelings are opposed to public benefit, and where, while the former are as much as possible to be respected, it is a duty not to lose sight of the latter and more important object.

Case of Acute Rheumatism translated to the Heart. By Andrew Armstrong, Esq. Assistant Surgeon, Grenadier Regiment of Foot Guards.

On the 7th of November, Thomas Pinder, private soldier in the grenadier regiment of Guards, a young man, of fair complexion and slender form, was admitted into the regimental hospital with acute rheumatism, characterized by very severe pain in the wrists extending along the fore-arms, violent pyrexia, a full and hard pulse, great thirst, furred tongue, and a costive state of the bowels. Twenty-four ounces of blood were immediately taken from his arm in a full stream; he was ordered a brisk cathartic, and put on fever diet.

On the morning of the 8th, he was found to have passed a sleepless night, the pain in the joints being very severe: indeed, none of the symptoms were milder. His bowels had been freely opened; and the blood exhibited the sizy appearance denoting acute local inflammation in a high degree. He was again bled to the same extent as the preceding day, and ordered small doses of tartarized antimony, to

the extent of one-fourth of a grain every three hours.

On the 9th, the symptoms appeared a little milder, though still very urgent. The antimonial medicine was continued, and he took ten grains of the compound powder of ipecacuanha at night. The appearance of the blood was as inflammatory as before.

On the 10th, he complained for the first time of cough, but it gave him scarcely any inconvenience. His bowels had not been moved the preceding day; and the pains in the joints and fever were undiminished. A brisk cathartic, of calomel and compound extract of colocynth, was again prescribed; which was to be followed up with half an ounce of Epsom salts every two hours, until the bowels had been well opened.

On the 11th, his symptoms continued very severe, although the opening medicines had fully answered the purpose. The cough was more frequent, and he complained of its being attended with pain in the left side. He was again bled, and continued the use of the tartarized antimony, with the intention of producing a diaphoretic effect.

12.—His pulse had acquired a degree of strength and fulness exceeding any thing of the kind that Mr. Watson, the surgeon on duty, or I myself, had ever met with before. It was now thought proper, as affording him the only chance, to bleed him either *ad deliquium*, or, should this not happen, to a very great extent. Forty ounces of blood were taken very rapidly from the arm, from a large orifice. Syncope, however, was not produced; nor was his pulse considerably affected by it. He took the following mixture:

℞. Liquor. Antimon. Tartariz. ʒij.
——— Ammon. Acet. ʒij.
Aquæ, ʒvj. M. ʒjss. 3tia quaque hora sumend.

On the 13th, he had passed another sleepless night, from the violence of the pain in his arms. His cough, and the pain in the left side, which he referred exactly to the situation of the heart, had also increased. His bowels were again disposed to be confined, and the arterial action was but little diminished. A purging enema was thrown up, and he continued the use of the mixture, to which forty drops of the tincture of digitalis were added. He previously took another cathartic.

At the evening visit, the disease was evidently gaining ground. He complained more of the pain of the left side, and his pulse was as hard and full as ever, vibrating most powerfully under the finger. Thirty-six leeches were applied to the left side, with instructions to encourage the bleeding; and the dose of the digitalis was increased.

On the 14th, he was considered rather better, and hopes were entertained that there was still a chance of his recovery, as the pains in the arms were milder, and he complained less of the pain in his side. These hopes were, however, of short duration: he was seized with fainting fits whenever his head was raised from the pillow, and in one of them he expired, at two o'clock P. M. on the sixth day of the disease.

Dissection.—On opening the cavity of the chest, the immediate cause of his death, as we had conjectured, was clearly ascertained to be inflammation of the heart; that viscus was considerably enlarged in size, and the surface every where covered with a layer of coagulable lymph, so loosely adhering as to yield to slight pressure with the finger. The liquor pericardii was more abundant than usual, and of a turbid reddish colour. The inflammation had not extended to the lungs; and all the other viscera, both in the abdomen and the thorax, were apparently healthy.

Med. and Phys. Journal.

Remarks on Abortion. By H. W. Ward Esq, Surgeon.

If enquiries become interesting as the subject on which they are made are

intricate, the following will, I think, be allowed to be one of this number; and I trust it may be the means of causing the further investigation of a subject of such importance. The cause of the death of the fœtus in utero, is a subject which has for many years occupied the talent of many able men, and it has been referred to a great variety of sources; but the practice which a removal of these causes would in theory seem to warrant has, more frequently than otherwise, proved ineffectual; but, in those cases where the cause of the accident is apparent, it may sometimes be prevented; and, from an attentive consideration of this point, it is that I am enabled to report the success of the mode of practice I have now to lay before the profession. And here, in justice to Dr. D. Stewart, an able obstetric practitioner and lecturer, I acknowledge that I was in a great measure led to this plan of proceeding, by learning from him the efficacy of opiate suppositories in preventing the death of the fœtus in utero, by allaying the irritation of the bowels, which he considered the cause of it.

It was an idea entertained by that able practitioner, the late Sir Richard Croft, that diarrhœa generally preceded or accompanied abortions; but, with deference to that gentleman's opinion, I think diarrhœa is frequently the immediate cause of it: and why I entertain such an opinion, I shall hereafter point out.—Some time ago I was called in to attend a patient, who was in the fifth month of pregnancy, but had no pains that seemed to warrant any idea of labour. I was informed by her attendants, she had never borne a living child, but had aborted three successive times, at this period of gestation; and, from the similarity of symptoms with which she was now attacked, they greatly feared a recurrence of the accident. I regretted that I had not been called in earlier, as a diarrhœa, which was always the most prominent symptom, had existed for four days. As my patient was extremely exhausted by the complaint, I ordered an aromatic cretaceous mixture, with opium; but, in less than eight hours, the fœtus was expelled, dead. The placenta was retained, as is common in such cases, longer than is usually the case in natural labours, and, after waiting an hour, I extracted it. No untoward symptom arose, and patient recovered.

I was again called on to visit this patient, then also in the fifth month of pregnancy, and labouring under precisely the same train of symptoms as before detailed. As I considered it would be, perhaps, a more fortunate practice, I ordered a laxative draught with oleum; which, however, produced no alteration in the nature or quantity of the alvine evacuations, and I again ordered the cretaceous mixture as before. Notwithstanding this, my patient still continued to labour under these symptoms. I then ordered the cretaceous mixture to be laid aside, and recommended the use of opiate suppositories, which I had hitherto known to be of great service in preventing similar accidents, arising from irritation in the bowels, which I was of opinion was the cause of all the mischief in this case. This plan, however, was attended with no good effect: and, fearing danger existed in delay, I also laid this aside, and wholly depended on large and repeated doses of opium, to be given with a view of allaying the irritation, and preventing a recurrence of the accident. This had the desired effect of subduing the complaint; my patient went through the usual period of utero-gestation, and was delivered of a living child. In the former illness to which I was called, I have no doubt that uterine contraction had begun, and therefore the opium was of no avail; but it must be evident that, if opium be freely given before such action be set up, it probably may—and I think I am right in saying, generally will,—be successful in preventing it. From what I have said in the preceding part of this paper, it

will appear that, in the former illness, the diarrhœa did not abate, and abortion was the consequence; but in the latter, where it was checked by means of opium, my patient went through the usual period of utero-gestation, and was delivered of a living child; a circumstance which never before took place when the diarrhœa was unabated; and hence I think it reasonable to infer this was the cause of the former abortions.

I have said, where the cause of the accident is apparent, it may sometimes be prevented (for we know, if arising from a syphilitic taint, debility, or diseases of the uterus, it may be remedied,) by a removal of these causes: but, on the other hand, cases will occur where all our exertions will be foiled. Among them may be classed those we sometimes find, where the uterus will not allow a sufficient distention to go through the full period of utero-gestation: others, where the uterine vessels do not supply a sufficient quantity of blood for such purpose. And it will also be readily admitted that, where one abortion has taken place, it is generally the precursor to another.

The principal motive I have had in view, has been to stimulate those members of the profession, whose obstetric practice is extensive, to a further inquiry into this important subject. —*ibid.*

Cases of Puerperal Convulsions. By Dr. Alphonse Menard.

A young woman, between nineteen and twenty years of age, of good constitution, and very stout, in her first pregnancy, had been in labour four days, when I was called to attend her. On my arrival, she was in dreadful convulsions, affecting the whole body: the features, particularly, were horribly distorted; the tongue clenched between her jaws, foaming at the mouth, &c. She remained in this state nearly a quarter of an hour, which was succeeded by an universal torpor of the like duration, when she became sensible, but without the slightest recollection of what had happened. It was then about one in the afternoon. Finding the pulse full and rapid, I took a large quantity of blood from the arm, and prescribed a mixture containing the vitriolic æther and ammonia. The orifice of the uterus was rigid, hot and half dilated; and the head of the child presenting, appeared to be very large. She had no flooding nor discharge of any kind. The abdomen exhibited two distinct convex surfaces; one, produced by the distended uterus, occupied the space extending from the epigastrium to the umbilical cicatrix; the other, immediately above the pubis, caused by the bladder, which was distended with urine. The labour pains, which at first were strong, for the last hour had scarcely been sensible. After having fulfilled the first indication by bleeding, it remained to draw off the water, and hasten the delivery, as the distension of the womb appeared to be the cause of the convulsions. I attempted every method of introducing the catheter, without success. I then turned all my attention to the os uteri, but was interrupted by another fit, which however was not of so long duration as the preceding one. A small wooden cylinder was inserted betwixt the teeth. Without entering into particulars, I shall merely state, that the dilatation of the mouth of the uterus was exceedingly tedious and painful, during which time the patient had six attacks of similar fits, though not equal in duration: the contraction of the jaws, in one instance was so strong, that two of the incisor teeth were broken. Venesection was repeated three times, and a warm bath administered, in which she could only remain half an hour. At midnight, during the last fit, I was able to introduce my hand into the uterus; during the succeeding collapse, I was enabled to empty the bladder, turn and extract a stout male child, which was dead. Its death, I

suppose, happened about the time of the first convulsion; and from the contraction of the extremities (the inferior ones particularly) I presume it had sympathised with the mother,—a circumstance which struck the assistants as well as myself. Another circumstance deserving notice is, that the lochial discharge did not take place till twelve hours after the accouchment. The subject of this observation experienced no accident after the expulsion of the fœtus and secundines, and at present enjoys perfect health.

* * * * * * *

During my residence in Paris, 1820, I was called to attend a lady, who had been in labour two days at the time I was sent for, and affected by convulsions similar to those described above. Every symptom indicated a general plethora, and I immediately let blood to a large extent. The pains recurred within a quarter of an hour after the depletion, and the left thigh of the patient (to use her own expression) was benumbed from excess of pain. On examination, I found that the os uteri was concealed in the left iliac fossa, with the head of the child pressing strongly above it:—this I considered as the cause of the mischief. I proceeded to lay the patient on the right side, and pressing the abdomen with one hand, used the other in dilating and drawing the orifice of the uterus to its proper situation: after which, with considerable difficulty, I seized the child by the legs, and effected the delivery. The fits in this case also, recurred at irregular intervals. The following day, the patient had no recollection of having been delivered; was without fever, and rapidly recovered; since which time she has had a child (now living) without any accident. In this, as well as in every other case I have observed, the child was born dead; and the contraction of the extremities, and features evidently denote its having participated in the affection of the mother. The woman attacked by convulsions has no warning of the return of the paroxysm, but I have noticed its approach by particular signs: thus, in the first case, the patient experienced an intense thirst previous to the first three attacks, and the four last were preceded by feeble but repeated pains. In the last case, a convulsive action of the eyeball, and a tetanic affection of the wrist were perceptible.—Lastly, the pulse, in all cases I have seen, gave the most certain indication: at the commencement it was full and quick, then gradually got weaker during the paroxysm, still retaining its rapidity; at the termination it gradually diminished, till almost imperceptible, then progressively regained its vigour as the patient recovered her faculties.

(*Journal Complementaire, Janvier*, 1823.

TO THE EDITOR OF THE MEDICO-CHIRURGICAL MAGAZINE.

MR. EDITOR,

Permit me through the medium of your Weekly Magazine to offer a few observations in answer to a Letter from G. S. which appeared therein last week upon the subject of Dr. Badeley's narrative.

I am, Sir,
Your most obedient Servant,
28th Feb. 1823. *X. X.*

SIR,

Mere assertion is by no means proof, and before an individual endeavours to refute the arguments of another, he ought to ascertain whether his adversary has laid himself open to attack, and whether his own powers are sufficiently strong to take advantage of it; for a bad defence is worse than none, as it gives the opponent a greater triumph.

I observed in your Magazine of the last week but one, a Letter on the subject of Dr. Badeley's Narrative of Miss O'Connor's cure from G. S., in which the writer endeavours to prove, (almost without argument,) that the cure could not be effected by a miracle, because it was ten days before the disease was removed; and also asserts,

that all miracles operate "*instanter.*" Now I think it is certainly most absurd to assert, that unless a miracle produce an instantaneous cure, it cannot operate at all. If an individual were reduced to a skeleton by a violent fever, and a miracle were to remove his complaint, would it give him his perfect strength and health in an hours —most certainly not!. there would be a gradual amendment.

I think the writer of the Letter in question,overrates his powers,or is one of those who never blot out what they have once written; for he has completely failed here,—and like the Ox and the Frog in the Fable, the attempt has ended in his own destruction.

I am rather at a loss to know what work G. S. has been perusing upon the subject of miracles, for his ideas upon their general operation are very erroneous; and for information, I should advise him to dip a little oftener into the New Testament, of which he appears very ignorant.

The author of the Letter is evidently a young man; that is much in his favour:—but I think before he attacked the character of Dr. Badeley, it would have been much better for him, had he endeavoured to obtain a little portion of that friendship with the world, which the Doctor possesses, as a proof of merit, and which has raised a bulwark round his character, too strong to be shaken by the weapons of those who are envious of its prosperity, and jealous of its merits.

X. X.

MELANGE.

Vaccination in the Roman States.—By a late edict which has been published, at Rome, by the papal secretary of state, it appears that very important arrangements, in various points of view, have been made towards the more general and perfect propagation of vaccination. A central establishment, with a secretary, &c. has already been organised; and soon a vaccinating commission will be appointed for each of the provinces.—*(Vienna Gaz.)*

Small Pox in Prussia.—In the Prussian monarchy, out of 484,523 children, born in 1821, 40,000 have been vaccinated. During the above period, there died of small pox, in all the proviness of the dominion of the King of Prussia, 1,199 persons. Before the introduction of vaccination, from 30 to 40,000 individuals annually died of the small-pox. —*Ibid.*

Population of Russia and instances of longevity.—From the Edinburgh Philosophical Journal, No. xv.—In the year 1817, the number of births in Russia is stated at 786,810 boys, and 711,796 girls; the number of deaths at 423,092 males, and 405,469 females; of whom 208,954 died under five years of age. The increase of population was 670,045. The number of individuals who had attained the age of

60	years was	68,723
70		38,765
80		16,175
90		2,108
100		783
115		83
120		51

Botany.—The wonderful progress made in this branch of science in late years, may be in some measure estimated by the following comparative summary, and especially a late German enumeration; which treats of it. Linnæus has 34 veronicas,Persoon 63, Wahl 73, Roemer and Schulles have in their new edition 136. Of Utriculariæ, Linnæus has 8, Persoon 18, Roemer and Schulles 61. Linnæus has 4 Gratiola, Roemer and Schulles 42. Linnæus has 32 Salviæ, Wildenow 76, Persoon 104, Wahl 137, Roemer and Schulles 173, &c. The authors last referred to, have retained the Linnæan system, except the 23rd chap. One volume only is published; the second volume, now in the press, is announced to contain all the grasses of the third class.

OBITUARY.

January 17, in his 72nd year, George Edwards, M. D, of Barnard Castle, in the county of Durham, author of various political publications and writings relative to the improvement of national affairs.

On the 1st inst. aged 25, Sophia, the wife of W. S. G. Davies, surgeon, R. N. after an illness of nearly twelve months.

On the 6th inst. Harriet, the infant daughter of Dr. Dennison, of Guildford-street.

* We give this letter a place merely to convince our readers that we are "open to all parties, and influenced by none;" though, we confess, we see little or nothing in it, tending to relieve Dr. Badeley from the imputation of having surrendered his faith too easily to the absurd idea of the miracle that was supposed by him and others to have operated so effectually in promoting the ultimate, though by no means the instantaneous re-establishment of THE NUN OF NEWHALL.—ED.

METEOROLOGICAL JOURNAL.

By Messrs. WILLIAM HARRIS and Co. 50, Holborn, London.

From January 20, 1823, to February 19, 1823.

	MOON.	Rain Guage	THERM.			BARO M		DE LUC'S HYG.		WIND.		ATMOSPHERIC VARIATION		
			9 A. M.	MAX.	MIN.	9 A. M.	10 P. M.	9 A. M.	10 P. M.	0 A. M.	10P. M.	9 A. M.	2 P. M.	10 P. M
Jan.														
20	☾		16	26	30	29.56	20.61	84	90	E	ENW	Foggy	Fine	Snow
21			27	30	24	29.70	29.77	87	89	E	E	Cloudy		
22			25	26	20	29 80	29.82	82	80	E	E	Fine	Cloud.	
23			22	29	22	29.70	29.53	86	80	ESE	ESE	Cloudy	Fine	
24			24	25	22	29.60	29.73	75	85	E	E var.	Fair	Fine	
25			23	24	21	29.68	29.52	80	96	E	ESE	Fair	Snow	
26	○		26	30	28	29.63	29.65	90	94	ENE	E	Fair		
27			29	31	36	29.52	29.33	84	98	SE	SSE	Cloudy	Rain	
28			40	44	10	29.34	29.20	100	95	SW	SW	Rain	Cloud.	Rain
29			45	49	44	29.02	29.02	99	98	SW	W	Rain	Sho'ry	Cloud.
30			45	44	40	29.30	29.31	98	96	W	WSW		Fine	Fair
31			41	41	39	28.06	28.90	97	78	ESE	ESE	Cloudy		Rain
Feb.												Cloudy		
1			40	45	34	28.75	28.64	79	98	E	E	Rain		
2	☽	.43	38	42	40	28.55	28.63	99	98	ENE	E	Rain		
3		.17	41	43	30	28.77	29.00	99	94	E	NW	Foggy	Rain	
4			33	37	29	29.20	29.27	83	76	WNW	WNW	Fine		
5			30	35	30	20.35	29.63	76	81	NW	ENE	Fine		
6			31	34	30	29.37	29.25	88	97	SE	SE	Fine	Snow	
7		.29	32	36	31	29.17	29.00	100	95	S	SSE	Rain		
8			33	39	33	29.34	29.40	85	79	WNW	WSW	Fine		
9		.11	37	42	37	29.51	29.34	76	88	NW	W var.	Very fine		Rain
10		.15	42	48	41	29.33	29.23	85	88	WSW	NW	Rain		Cloud.
11	⊙	.16	45	51	45	29.30	29.26	87	89	WSW	W var.	Rain		Cloud.
12			47	52	39	28.21	29.20	84	85	SW	WSW	Cloudy	Fine	
13			41	45	35	29.38	29.46	71	74	WSW	S	Fine		
14		.09	37	42	37	29.30	39.40	77	79	NNW	WSW	Fine	R ain	Cloud
15		.25	40	44	33	29.63	29.87	83	87	NE	N	Rain		Cloud
16			35	39	32	30.00	30.09	79	83	NE	NE	Showery		
17			34	38	35	30.01	29.85	85	82	SE	S	Showery		Fair
18	☾		37	43	35	29.64	39.22	80	84	SW	S var.	Showery		Rain
19		.18	37	41	36	29.30	29.38	79	74		W	Fine	Fair	

NOTICE TO CORRESPONDENTS.

Communications are received from D. Y., Tyro-Medicus, and Æsculapius.

The Letter signed D. D. came to hand; and although we can have no particular objection to giving it a niche, *as he requests, we beg leave to state that we are no advocates for the stale buffoonery of the "metallic tractors," or their influence over either mind or body.*

The respectable article signed J. C. we apprehend is a point or two out of our course; we shall nevertheless give it a serious consideration, before we pronounce any definite opinion upon it.

We thank A. B. for his very acceptable information; and if he will enter more into particulars in his next, we shall feel obliged.

We have also to acknowledge a Letter from Camberwell on an important and newly invented Surgical Instrument.

Our next will contain the substance of the ORATION *delivered this day, at the Medical Society, Bolt Court.*

All Letters &c. (Post Paid,) addressed for the Editors, at the Publisher's, &c.

Printed by Plummer and Brewis, Love Lane, Eastcheap;

Published by Cox and SON, St. Thomas's Street, and 39, High Street, Southwark. Sold also by Sherwood, Neely, and Jones, Paternoster Row; Simpkin and Marshall, Stationers' Court; Callow and Wilson, Prince's Street, Soho: John Cox, Berner's Street, Oxford Street; W. Stewart, South Bridge Street, Edinburgh; and Hodges and M'Arthur, Dublin.

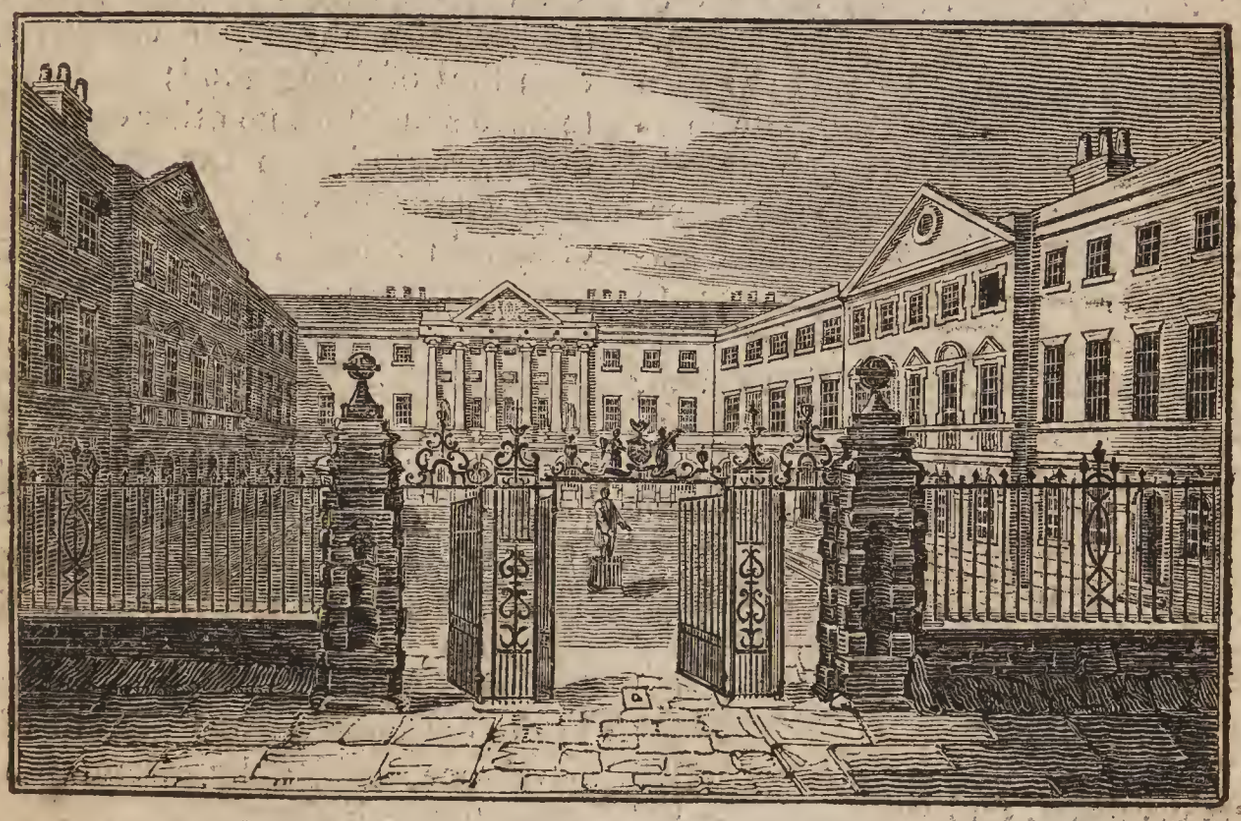
THE WEEKLY

MEDICO-CHIRURGICAL & PHILOSOPHICAL MAGAZINE.

No. VI. SATURDAY, MARCH 15, 1823. *Price 4d.*

"FLORIFERIS, UT APES, IN SALTIBUS OMNIA LIBANT
OMNIA NOS, ITIDEM, DEPASCIMUR AUREA DICTA."

GUY'S HOSPITAL.



THE edifice, which the above plate is intended to represent, is a lasting monument of that disposition for charity which has ever characterised the British character. Whilst the benevolent mind feels elated in comtemplating the extent of human misery relieved in similar establishments, it instinctively turns to pay homage to the liberality, and reverence to the piety of those beneficent persons by whom they were erected and endowed; whilst it naturally enquires the source from whence their origin is derived. The erection and endowment of the present magnificent structure, Guy's Hospital, are, in all probability, to be attributed to the excellence and utility of charitable institutions, which its munificent founder observed whilst a Governer of St. Thomas'. Mr. Guy was one of the many liberal benefactors and zealous supporters of the latter institution, during the close of the sixteenth and commencement of the seventeenth centuries; and, from an attentive observance of its great importance to the afflicted poor, during the number of years in which he interested himself, particularly in its management and direction, he was led to the noble resolution of appropriating his wealth to the erection and endowment of a similar establishment. From an obscure beginning, and through great industry, aided by the most frugal habits, Mr. Guy obtained, in the business of a bookseller, and by several successful speculations, an immense fortune, with which he was enabled, (besides erect-

ing and endowing the Hospital in Southwark) to build some Wards at St. Thomas's, and bestow upon that charity considerable pecuniary assistance. He gave £400 per Ann. to Christ's Hospital, erected and endowed some Alms-houses at Tamworth, the town which he represented in parliament, and which was his mother's native place. He bestowed various other sums for charitable purposes, and bequeathed £80,000 to his relations at his decease. He lent a very considerable sum for ever, to the Worshipful Company of Stationers of which he was a member, at a moderate interest, besides other gifts which are annually distributed by the Master, Wardens, and Assistants of the said Company, and who pay £125 per Ann. to the Treasurer of Guy's Hospital; the supposed interest of the above sum, which, it is asserted, amounted to nearly £10,000. Upon forming the resolution to institute an Hospital upon the same magnificent scale as those of Royal Foundation, Mr. Guy obtained from the Governors of St. Thomas' the lease of a plot of ground, upon which he expended the sum of £18,793 in the erection of the stately pile which bears his name, and which he had the satisfaction of seeing roofed in before his death; an event that happened in the 81st year of his age, December 17th, 1724. He bequeathed by will the sum of £219,499 for its endowment, and directed a system of government to be observed for its management and regulation, as nearly as possible like that of St. Thomas', which he so highly admired. This extraordinary and very benevolent man, who left more to charitable uses than any other private individual on record, whose appearance was so mean, that in some instances, it is said, the alms of the humane were pressed upon him as upon a mendicant, and whose habits were so parsimonious, that he dined upon his shop counter, with an old newspaper for a table cloth; possessed in an eminent degree those inestimable qualities which are the greatest ornaments of the human character. He was pious and unostentatiously charitable, and his heart was feelingly alive to the distresses of his fellow creatures: he sought for wretchedness that he might have the delight of relieving it, and appears to have been endowed with that enviable greatness of mind, which is superior to the impulses of vanity, and those narrow motives, which too often actuate mankind. He seems to have been uninfluenced by any other consideration than that of doing good; and appears to have sought for no other commendation or reward than the applause of a good conscience, and a pleasing sense of moral rectitude.

This brief historical sketch of the origin of Guy's Hospital and of its immortal founder proves to us that good men only are capable of doing good—and also teaches us, that no man ought to be censured for his actions while his motives are unknown. The foundation of Guy's Hospital proceeded from a combination of the best motives, and as such was virtuous in the extreme: it was the gift of benevolence, guided by discretion, and animated with piety.

Superintended by the first Medical and Surgical talent that England or even Europe can boast of, regulated by the wisest œconomy amidst the dispensations of the most active benevolence and commisseration for every class of suffering humanity, so perfectly and truly in consonance with the pure philanthrophy and unparelleled munificence of its unostentatious founder, Guy's Hospital stands unrivalled in the annals of charity, while it commands universal admiration and respect—and as such, will pass down to posterity a lasting and imperishable monument of the good a man of wealth has it in his power to do when actuated by the best of motives—charity to all mankind!!!

In speaking thus of this great and

memorable institution, the work of one individual, we cannot be understood otherwise, than as including the Hospital of St. Thomas's (that owes so much to the same origin) and particularly since the two have been, as they now stand, so wisely and so judiciously united in one; they are become so perfectly in unison, in soul and in substance, if we may use the expression, that the one cannot be named without the idea of the other instantly presenting itself.like Castor and Pollux, we trust, they are now for ever inseparable; and long may the highly distinguished characters,that adorn the one and the other, continue in harmony and good fellowship, to live and to enjoy the uninterrupted blessings of health with the fullest extent of those enlightened intellectual faculties which so eminently characterise their devotedness, and professional ardour for the benefit of mankind.

BIOGRAPHY.

MEMOIR of the LIFE and WRITINGS of JOHN GORDON, M.D. F.R.S.E.; late Lecturer on Anatomy and Physiology in Edinburgh, by DANIEL ELLIS, F.R.S.E. &c. &c.

(Continued from page 69.)

In the year 1807, Dr. Gordon became an inmate in Dr. Thomson's family, in which he continued to reside for several years. Looking forward to his future establishment, he had no reason to expect any material assistance from his father; and thrown thus, at his very outset in life, on the resources of his own talents and industry, he was animated to exertion, as well by the necessities of his situation, as by his zeal in the pursuit of knowledge. During the summer of this year, on the suggestion of Dr. Thomson, he gave, by way of trial, some demonstrations in Osteology to a few of his particular friends. The easy style of delivery, the accuracy of statement, and methodical arrangement of these demonstrations, soon satisfied his friends that he possessed every qualification necessary in a teacher of anatomy. Encouraged by the approbation he received, he announced in December of the same year, a course of public demonstrations in anatomy, which was attended by a small number of pupils. The following winter, to his lectures on Anatomy, he added a short view of Physiology; and he continued to teach those subjects in connexion for several years.

Being now established in Edinburgh as a Lecturer on Anatomy, Dr. Gordon, who, as before mentioned, had already obtained a diploma from the Royal College of Surgeons, was desirous of becoming a member of that body. With the usual forms he was accordingly admitted a Fellow in October 1808; and, in conformity with the regulations respecting the admission of ordinary members, he, on this occasion, chose for the subject of his "Probationary Essay," the "Dislocations of the Thigh-Bone." Much difference of opinion has prevailed among surgeons on many of the points connected with this serious accident, namely on the several directions in which the head of the bone may be dislodged from its socket:—on the position which it then occupies on the bones of the pelvis;—and on the condition of the ligaments, and especially of the muscles, of the part concerned. To ascertain these several points, Dr. Gordon not only studied the cases recorded by practical writers, but had recourse to experiments on the dead body, with the view both of verifying the accuracy of their descriptions, and rectifying the discordance that existed among them. Many surgeons have made artificial imitations of luxation on the dried bones of the pelvis and femur, or on the recent bones when deprived of their investing muscular substance. Such experiments, however, are fitted only to indicate the obstacles to reduction, from certain prominences, and depressions in the bones themselves; but not to determine, amidst the violent derangement that has been induced, the resistance opposed by muscular action. To discover, therefore, what muscles contributed to retain the head of the bone in its displaced situation, and what were most calculated either to oppose, or to favour its return, Dr. Gordon produced artificially, on the dead body, the several varieties of luxated femur that occur in practice. Previously, however, to these operations, the soft parts surrounding the articulation were exposed by dissection; so that he might be able to mark at once the efficiency of certain parts in resisting luxation, the position which the head of the bone occupied when the luxation had taken place, and the derangement induced among the muscles. So correctly did this artificial imitation on the dead body correspond with the dislocations that occur in the living subject, that it was found exceedingly difficult, if not altogether impossible, to produce artificially, any other species of dislocation than those which actually present themselves in practice; and the external character of the real accident in the living body, and of its imitation on the dead one, always corresponded closely with each other.* Information thus sought,

‡ It appears, that Professor Bonn of Amster-

coupled with accurate observation of the external appearances of the parts, could not fail to improve the means of discriminating the varieties of dislocation to which this joint is exposed; to impart correct notions of the actual position of the displaced bone, and especially to exhibit the state and condition of the several muscles, whose relative situations and actions suffer, in these accidents, such great derangement;—all of them circumstances which lead at once to clear conceptions of the real nature of the accident, and suggest the readiest and most effectual modes of relief. This Essay was inscribed to his friend, the late Mr. Allan Burns, Lecturer on Anatomy and Surgery in Glasgow, whose uncommon zeal and industry in his professional pursuits were well known to the public, and rendered his premature death a subject of deep regret to all who knew his talents and his worth.

Dr. Gordon continued his studies and his lectures for several years with increasing success, till his rising reputation pointed him out to its late illustrious secretary, as worthy to become a member of the Royal Society; and on the honoured recommendation of Mr. Playfair, he was accordingly admitted in January 1812. Soon afterwards, he communicated to Professor Dugald Stewart some very interesting observations on the case of James Mitchell, a boy born blind and deaf, which were subsequently read to the Society, and published in its Transactions.

In the summer of this year, 1812, Dr. Gordon quitted the family of Dr. Thomson, on his marriage with Miss Rutherford, which took place in the month of June; a connection which, having been long founded in mutual esteem and affection, and cemented by similarity of tastes and dispositions, realized, through the remaining period of his life, his fondest anticipations, and satisfied his highest hopes. By this lady he had four children, of whom one son and two daughters survive their father.

In the year 1814, he was a candidate for the situation of one of the junior surgeons of the Royal Infirmary; and, aided by the reputation he had now acquired as a teacher of anatomy, he was in consequence elected. By the regulations of that Establishment at that period, the senior surgeons executed the duties of attendance on the sick, and performed the capital operations; while to the juniors was assigned the duty of acting in the absence of the seniors, of assisting them in their operations of visiting the patients who require surgical aid in the medical wards, and of preparing for exhibition such cases of morbid dissection as occurred in the hospital, and might be deemed interesting for the illustration of disease.

(To be continued.)

dam (referred to by Professor Turner in his 'Probationary Essay' on the dislocations of the shoulder-joint, Edinburgh, 1812), had previously employed a similar mode of enquiry, in relation to that joint.

Heads of an Oration on Injuries of the Brain, &c. delivered (at the London Coffee House, Ludgate Hill, on the 8th instant, being the Fiftieth Anniversary Meeting of the London Medical Society,) by MR. EDWARD GRAINGER, *Lecturer on Anatomy and Physiology, Borough.*

In adverting to injuries of the brain, Mr. Grainger observed that, they produce considerable effect upon the animal functions, but as it did not become him then to enter into the whole of these injuries, he should confine himself, taking time and place into account, to that termed simple concussion, and proceed to offer a few remarks on the combination of mind with matter.

"The motive by which I am induced to bring the first subject before your view, arises from it having been my lot, from the earliest period of my professional career, to have been situated in an extensive manufacturing district, where injuries from accidents to various parts of the body, have been very common; among which, those of the head, have formed a very prominent part. When I considered the importance of these injuries, the promptitude of their action on the human frame, with the vague directions laid down for their mode of treatment, it made so strong an impression on my mind, that I determined, the first opportunity that presented, to bring the subject before the profession for a legitimate mode of treatment.

"The first thing that occurred to me as offering considerable difficulty in these cases, was the laws laid down for the application of the Trephine, as ordered to be applied in cases of simple injuries, &c.

"During the short term of my professional career, and short indeed it has been,—my attention has been particularly directed to injuries of the

brain; and, aided in these investigations as well in the operative part, as in the subsequent mode of treatment, by my father, I now embrace the opportunity of laying the results of my observations before this meeting. Proceeding therefore upon pure metaphysical principles, in order to avoid all theological discussion, I shall now enumerate the symptoms attending concussion of the brain; that is, an injury unaccompanied with laceration of its substance, membranes or blood-vessels; in fact, what is termed simple concussion, &c.

"The symptoms then concomitant on concussion of the brain are as follow;—The powers of the mind are diminished, accompanied with drowsiness; the patient however may be roused from this lethargic state; and, if asked a question, is able to give an intelligible answer. If moderate pressure be made on any part of his body, he is perfectly indifferent to it; but, if an incision be made, he is not only sensible of it, but will express his sense of the pain it may occasion him. The pupil, when exposed to light, contracts slowly. The action of the heart, as indicated by the pulse, is natural; and to these vomiting may be super-added, &c.

"I am fully aware that other symptoms are occasionally attendant on concussion of the brain, such as rigors, great restlessness, convulsions, spasms of the extremities, and diaphragm, but here it would be foreign to my purpose to attend to them; it being only my intention to consider those which generally take place, and are derived from the observation of cases where re-action, after the concussion, was productive of suffering, &c.

"The patient frequently falls down senseless, and when found in this state, his face is pale, extremities cold, and breathing interrupted. This state is very soon altered either by natural or artificial excitement. I would say, that in concussion, there is a diminution rather than a suspension of the mental and corporeal powers. The powers of sensation and volition are for some time suspended. After a time, aberration of mind, quick pulse and anxious breathing are observed. This state comes on too rapid for inflammation to take place, and therefore, I believe it to be nothing more than an universal excitement. While employing the term universal excitement, I am sensible how indefinite it is with that of inflammation. There are terms upon which none can agree; and the subject it may be our desire to render clear, is often obscured by them. If however, we are enabled to render more clear, both as it respects the injury itself, and the symptoms accompanying it, by the introduction of new terms, we are justified in adopting them, &c.

"I would define excitement to be that state of body between natural and actual inflammation; for example,—a man receives a blow on the head which confuses him; in a few minutes however his senses are restored, but pain in the head and quick pulse remain for a short time, and then disappear. Surely no one will here contend, that inflammation had been set up. No—it was what is termed excitement. This term, excitement, has been much employed by a celebrated writer (Dr. Armstrong) to whom the Medical Profession are so much indebted for his valuable works on Medicine; and who, I am sure does not require my efforts to enhance his value. It is (excitement) a legitimate distinction between the natural state of the brain and actual inflammation. We are enabled to draw this conclusion from almost every days' experience &c. It is a matter of conjecture only in what state the brain is, in those persons who die comatose; as but few opportunities of dissection have occurred, to throw any light on the subject, persons so seldom dying in this state. They often die from inflammation coming on, but then the brain is changed in its aspect. Opportunities now and then occur of examining the brain, but there are no

appearances here which can explain the fatal issue. But when we consider the organization of the brain and its important functions, we shall be surprised that it is not more frequently fatal. It is by observing the brain of those who die, and comparing them with the effects of disease on other parts, that we can in any way explain diseased action here. The practice we now adopt is too empirical, hence it is necessary carefully to observe the symptoms in the living, and the morbid appearances in the dead, in order to come to any scientific practice. Some contend that the vessels of the brain are præternaturally loaded, and refer you to the symptoms to establish their opinion. —For instance, as in partial coma.— While another but more general class contend that, the vessels of the brain are very empty. This opinion has received some support from an extraordinary circumstance that has been observed; viz., that vomiting frequently removes partial coma. Vomiting is supposed to effect this change by determining blood to the head; both opinions however have been carried too far, while the gorged state of the heart has not been sufficiently attended to. It is not confined to the brain. These vessels are influenced in common with other parts of the body. The action of the heart, and coldness of the extremities are scarcely to be detected at all. In those cases which have been examined, in persons who died in a comatose state without re-action, it has been observed in some, that the capillary vessels have been gorged with blood, while in others, this has not been the case. But that which is worthy of notice, and has always been found, is, that the great vessels on the right side of the heart, and the sinuses of the brain have been distended; and, is it not therefore to be believed that these symptoms arise from venous congestion and obstruction in the chest? These symptoms are difficult to be explained. It is well known that there is great sympathy between the brain, heart, and lungs. Since the lungs have their nervous influence diminished and are not capable of performing their function, it would seem that the influence given, re-acts on the primary seat of the disorder, and gives origin to the symptoms enumerated. I do not contend for this in unfavourable cases. What the first change in the brain is, is as yet beyond our reach. In concussion of the brain, the nervous vascular system is affected, and it is impossible that one should be affected without the other. What the functions of the nerves are, is as yet unknown; still it is certain that they are occasionally suspended or diminished by a blow on the head. It is on these grounds that the symptoms in this stage of depression are formed; viz., from a derangement in the nervous function? Experiments have been made by the correspondents of Majendie, to prove this influence. The experiments I refer to, were made on rabbits; they were struck on the head with force sufficient to destroy them, and no attempt was made at resuscitation. They were galvanised, which in many instances rapidly recovered them, by supplying the necessary nervous influence. It is necessary to state that, if the heart be stimulated to contract, it is not weakened by that contraction. It must be attributed therefore to derangement of the nervous system however produced. After a time, the animal functions are restored, and the action of the heart is performed in the usual manner, with only slight drowsiness remaining. If you keep your patient quiet, and prevent inflammation, he will get well. The heart beats regularly; the patient breathes freely. If the blood were partially decarbonized it would produce these symptoms, but this opinion is disproved from the regular action of the heart. Concluding then from all these, it is evidently a derangement in nervous function. Dissections, in many instances, have proved a distended state of the capillaries and sinuses of the brain, and vessels of the

right side of the heart. Where persons have died during the depressed state, we have found the surface cold, respiration impeded, the pulse weak and fluttering, &c.

The treatment in these cases must be regulated by the stage of the disorder, and accidental circumstances.

First of the depressed stage. As there is reason to believe that in concussion there is congestion in the vessels of the brain, the question will then arise, are we to remove this state by bleeding, or by stimulating? I assert that the depleting system is a bad plan; while stimulants, when judiciously applied, are good. I answer fearlessly to the opinion, that depleting, so forwards, the conjection of the vessels of the heart, that it is right to know, that, by opening a vessel, we shall often overload, rather than relievethem. I have known cases where great benefit has arisen from the employment of stimulants. Bleeding is blindly adopted in all injuries to the brain. "Oh! he has had an injury of the head. *Ergo* bleed." How it happens that the removal of a small portion of blood will destroy your patient, is difficult to explain; but the fact that it does so, is proved. Occasionally our most successful practice fails. The more we contemplate the wonders of nature, the more we are led to wonder and admire. Giving stimulants is not empirical; we have but one plan to pursue; that of giving tone to the nervous system, during the depressed state, when not caused by over distention of the blood vessels. In such cases stimulants should be had recourse to. Stimuli are very good remedies when properly managed,but prove very bad ones, when ill advised.

The internal administration of stimuli, as warm wine, or warm spirits, when admitted into the stomach; heat applied to the orifice of the body, warm bath, &c. have been recommended. Electricity I have not however sufficiently tried to advise the use of it. When the depressed stage has been removed, stimuli will do harm. When the internal action is restored, the great danger to be dreaded is the cause of that action; viz., inflammation with its consequences. If we allow but a few hours to elapse without depletion, there is great danger of inflammation, and death quickly following. This is no high coloured statement; many lives have been lost from want of prompt depletion; so quietness alone must not be depended upon. In many cases we can trace the result from the inefficiency of the means employed. Do we not see the surgeon often intimidated at a time when his best efforts are required? Oh, says he, "I will not bleed, I will stop till inflammation comes on:" the consequence is, the patient is destroyed. Such a man as this is not fit to exercise his profession. Venienti occurite morbo holds good here. Bleed either from the external jugular vein, temporal artery, or a vein in the arm; the quantity must depend on the effects produced. In the first bleeding you may stop short of actual syncope. I have seen cases where thirty ounces have been taken away at one bleeding; but we are to be influenced by the effect. Local bleeding, and purging actively, especially with calomel, will relieve, &c. The scalp should be shaved, and cold lotions applied to it. By bleeding promptly and rapidly as often as required, and purging, by regulating the different secretions, in most cases succeed, if very well managed; but if not followed up, will end in the death of the patient.

(The remainder in our next.)

PHYSIOLOGICAL OBSERVATIONS.

Magendie on Vomiting.

(Continued from Page 71.)

At the time Haller pronounced his opinion relative to the mechanism of vomiting, he had reached that high degree of fame to which only a few privileged men have the right of aspiring; and when almost all his decisions in matters of Physiology, passed for law throughout Europe. The doctrine of

Chirac, from that time, was completely forgotten. Since Haller, all authors who have spoken of vomiting, either in general treatises or ex-professional works, have viewed its phenomena as the immediate product of the contractility of the stomach; the abdominal muscles, and diaphragm, only contributing towards it in an accessory manner. The arguments of Lieutand, and the experiments of Haller and Wepfer, are then at once the cause of the discredit into which the opinions of Chirac have fallen, and the foundation of the present doctrine of vomiting. But, if for a moment we divest ourselves of the favourable prejudice which an opinion supported by Haller so necessarily inspires, we will not, it appears to me, be able to hinder ourselves from remarking that, the arguments of Lieutand against the doctrine of Chirac, however pressing they may appear, not being supported by experiments, are only pure speculative theories which are absolutely of no avail against facts.

In my opinion then, we shall no longer be able to dissemble, that all the inductions drawn from the experiments of Haller, on the irritability of the stomach and intestines, furnish but very dissatisfactory proofs for or against the present doctrine of vomiting; for, they may well cause us to suspect, but they do not demonstrate the contraction of the stomach during the act of vomiting. Let then the two experiments of Haller, and those of Wepfer, remain. Now, Haller's two experiments are far from bearing the stamp of precision and exactitude, which characterise the works of this celebrated man. The most important circumstances are omitted; every thing is limited to the following words; viz.— *sed apparuerunt præterea subitæ, vehementissimæ, repetitæ succussiones, ut facies anterior ad posteriorem accederet*

These two experiments then do not prove much, and if we absolutely wished to deduce consequences from them, it appears to me they would rather contradict than favour the actual doctrine of vomiting; for the sudden and repeated shocks by which the stomach is flattened from its superior to its inferior surface, towards the posterior, are much rather the effect of the contraction of the abdominal parietes than that of the fibres of the stomach, which are in no manner disposed so as to produce this flattening of the surfaces. Let us further add, that in a great number of other experiments, Haller did not see this contractile motion at the time of vomiting.

With respect to the experiments of Wepfer, they are, in my opinion condemnable, inasmuch as he excited vomiting with poisonous substances given in the greatest dose, often with metallic poisons; and, it is well known that these substances, determine, by their chemical action upon animal matter, a shrinking which should have been carefully distinguished from the peculiar contractiou of the stomach. Besides, supposing the experiments of Haller and Wepfer to be favourable to the actual doctrine of vomiting, of what importance are five or six experiments, to establish a doctrine in Physiology, a science in which, for so many reasons, experiments stand in such need of being multiplied?

These reflections, which I have conceived it necessary to make before I commence my investigions, have served as a fresh motive for giving myself up to them with all the care which the importance of the subject required. All my experiments have been made on dogs and cats, which are very fit animals for this kind of research, from the facility with which they are excited to vomit. My first experiment was made upon an adult dog about fifteen pounds weight, which I caused to swallow six grains of emetic tartar. I waited until the medicine excited nausea; I then made an incision in the linea alba, and introduced my finger into the cavity of the abdomen, so as to distinguish whether the stomach contracted or not. At each nausea, I felt my

finger strongly forced upwards by the liver, which was kept down by the diaphragm, and downwards by the intestines, pressed by the abdominal muscles. The stomach likewise appeared to me to be compressed; but, instead of feeling it contract, it seemed, on the contrary, to encrease in size. The nausea nevertheless observed shorter intervals, and the more marked efforts which preceded the vomiting, shewed themselves. It was not long before vomiting itself came on. It was then that I felt my finger compressed with a force really extraordinary. The stomach partly emptied itself of its contents; but I could distinguish no sensible contraction in it. The nausea subsided for a few moments, and I took the advantage of this suspense to enlarge the incision, that I might more easily perceive the stomach. As soon as the incision was extended, the stomach came into view, and made an attempt to force itself out of the abdomen; but which I opposed with my hand. After some minutes had elapsed, vomiting began again; and I was not a little surprised at seeing the stomach fill with air in proportion as the intervals between them were less distant. It was impossible to be deceived any longer, for the organ tripled at least its size; vomiting soon succeeded this dilatation; and, it became evident to every one present, that the stomach had been compressed without experiencing the least contraction in its fibres. It soon emptied itself of air and a portion of aliment; but immediately after the escape of these, it became flabby, and it was only after some moments that, shrinking upon itself by degrees, it resumed nearly the same dimensions as before vomiting. It was not long before a third fit of vomiting came on, and we saw the same series of phenomena reproduced: the entrance of the air and the swelling of the stomach were again sensibly apparent.

(To be continued.)

HOSPITAL REPORTS.

ST GEORGE'S HOSPITAL.

March 7th.

The left subclavian artery was tied at this Hospital in a case of Aneurism, by Mr. Brodie. We were much pleased at the correct and deliberate manner in which this operation was performed. An incision was made through the integuments and cutaneous muscle, along the upper edge of the clavicle, by which means the vein is avoided. The second incision having divided some small arterial branches, a short time was occupied in securing them. The vessel being at length arrived at and detached from its connections, the new instrument (of which an engraving appeared in a late number of the Medico-Chirurgical and Philosophical Magazine,) was passed round it, and the ligature brought through in the manner there described, with the greatest facility.

The man was in the operating room 15 minutes. On Tuesday, when we again visited the Hospital, we heard that he had been restless, and had had several rigors. His pulse quick and tongue furred. The arm has retained its natural warmth, but no pulse is at present sensible in the radial artery.

As might have been expected from the long exposure to the air, some sloughing has taken place, but whatever may be the final result, (which we shall not fail to notice,) much credit is due to the scientific operator, and also to the ingenious Mr. Weiss, whose instrument afforded such decided advantage.

A CALCULUS about an inch in length, and in the thickest part half an inch in circumference, apparently of the mulberry kind, was extracted from the urethra of a lad aged fourteen, by Mr. G. Ewbank; its continuance in the urinary passage had caused much swelling, and induced paraphymosis. The boy is now well.

WE WOULD direct the attention of our readers to the case of Sarah Hodges,

in Talbot's Ward. It is a fungus of a peculiar kind, which two years ago, when a tumor on the right heel was dissected out, but it shortly after reformed, and assumed a purplish hue. In the course of six months many spots of the same color, (very like echymoses) made their appearance on various parts of the body, more particularly on the inside of the thigh of the affected side, where they are in a large cluster proceeding an inch from the skin, they all feel hard, and save the heel and a large tumour on the skin, are not painful. The discharge from the heel is very fœtid; poultices are now applied.

LONDON HOSPITAL.

By Sir W. Blizard, last week an operation for strangulated femoral hernia. Patient since dead.

By amputation of both legs. Subject a man of colour.

ST. THOMAS'.

March 12th.

By Mr. Aston Key; Operation for strangulated femoral hernia, which had remained unreduced for four weeks; the patient (a female) had had no stool for a fortnight previous to the operation, the symptoms were slight hiccup, continual vomiting, &c. The greater part of the strangulated intestine was in a state of gangrene, which of course was not returned,—an artificial anus was attempted; a portion of omentum formed part of the hernia, the sac of which, formed by the peritoneum gave way. The patient was in such a weak and exhausted state as to render it necessary to administer stimuli during the operation. Death ensued on the morning following at half-past eight A. M. It appeared that rupture of the intestine had taken place before the operation, and that fœces had escaped into the sac.

The following operations also took place at this Hospital during the present week, viz.

11th. By Mr. Travers, operation for the cataract on a male and female.

12th. Mr. Key laid open the urethra to divide structure in a case of retention of urine.

12th. Mr. Lucas, cancer labii.

ACCIDENTS.

Case of concussion of the brain.

A Fracture of the cervi-femoris.

Fracture of the clavicle near the acromion.

Cæsarian Operation.—On Tuesday se'nnight this operation was performed on a woman named Rose M'Convill, in the vicinity of Newry, by Surgeon Bell, in the presence, and by the advice of Dr. Morrison. The woman is doing as well as, from the nature of the circumstances, could be expected.—*Limerick, March 7th.*

The circumstances that led to, as well as the results of this tremendous operation we hope shortly to be enabled to lay before our readers.

HOOPING COUGH.

The following Cases by John Webster, M. D. *Licentiate of the Royal College of Physicians of London; Physician to the Royal Infirmary for Sick Children, &c.; will be read with some interest, as they shew the marked benefit of the practtce recommended. The ratio medendi in all being to remove the affection of the head commonly met with in this complaint, but whether primary or secondary, it remains for future investigation to establish.*

Case 1.—Caroline Harvey, æt. two years and two months; 28th Novemqer, 1822. Has been ill two months. The mother says, she first complained of heaviness and pain of the head, with slight fever in the evening; the eyes were watery; and the child did not sleep well. These symptoms continued about fourteen days, when the cough and hooping first began. About a fortnight ago, complained of pain in the chest and difficulty of breathing, which have continued almost ever since. The cough and hooping have been very severe of late; and she has been very light headed, and often deli-

rious at night. Seldom sleeps well; has lost appetite and flesh; never has bled at the nose or mouth; and bowels are for the most part naturally opened. Has lately had from eight to ten fits of hooping in the day-time, and from thirty-five to forty during the night, particularly towards morning, when she has frequently from three to five fits in succession, which exhausts her very much. The affection of the head appears to have increased since a week or two ago. Tongue white and papular; thirst; no appetite; and she is often very sick. Has used a great deal of medicine, (quack, as well as others,) but without the slightest benefit whatever; according to the mother's statement, the child got worse, instead of better, after using them. The mother cannot account for the appearance of the disease, as the patient has not, after the most strict enquiry, been disposed to catch it from any other child; and a younger sister, who never had the complaint, but who has been constantly in the same room, and playing with her, has never yet been attacked with hooping-cough. Applicentur Hirudines duæ fronti. R. Calomel. gr. ss.; Pulv. Rhei, gr. ijss.; Pulv. Ipecacuanhæ, gr. ss. M. ter die sumendus.—30th. Leeches bled very well; scarcely any hooping, but cough no better; breathes easier; complains less of the head; bowels open, motions very dark and offensive; is feverish at night; tongue cleaner; no appetite, still thirsty: appears more lively. Pergat. *c.* Pulv. u. a *c.* Magnes. gr. j. loco Calomel. ℞. Antimonii Tartarizati, gr. j.; Theriacæ, Oxymellis Scillæ, āā ʒiij.: Aquæ puræ, ℥iv. fiat mist. coch. min. duo 2dis horis sumd.—4th. Dec. No hooping, very slight cough, quite well, discharged.—22nd. Has remained free from the disease since discharge.

Case 2.—Harriet Harris, æt. four years; 30th November, 1822. Has been affected with hooping-cough for three weeks; has from five to six fits during the day, and about twelve in the night; coughs up blood, red and frothy; tongue white; bowels costive; belly swelled.—℞. Calomel, gr. j.; Pulv. Rhei, gr. iijss.; Pulv. Scillæ, gr. ½. M. ter die. Habeat balneum tepidum, o. n.—3d Dec. Hooping not any better, had twelve fits during last night; stills spits blood; complains of pain of stomach; bowels open. Applicentur Hirudines duæ fronti. Pergat *c.* Pulv. u. a. *c.* Magnesiæ gr. j. loco Calomel.—7th. Has had six fits of hooping since yesterday. An eruption, somewhat like measles, appeared on the skin this morning; bowels costive, motions dark and knotty; tongue dry and furred; thirst; urine red coloured and plentiful. ℞. Pulv. Jalapæ. gr. iijss.; Potassæ Supertartritis, gr. vjss. M. mane et vesp. sumendus. ℞. Infusi Rosæ, ℥ss.; Magnes. Sulphatis, ʒss. M. ter die. Repetatur balneum tepidum mane et vespere.—Scarcely hoops any; head and skin feel very hot: eyes appear hydrocephalic; occasional delirium; pulse 140; bowels costive, motions black, knotty, and offensive; urine high coloured and scanty; screams frequently; and is always very restless. ℞. Calomel, gr. ss; Pulv. Rhei, gr. ijss.; Pulv. fol. Digitalis, gr. ⅛. M. 4 ter in die sumendus. Pergat *c.* haust. u. a. add. Spirit. Ætheris Nitrici, gt. xx. Repetantur balnea u. a.—12th. Hooping not so severe nor frequent: pulse 140; skin hot: does not scream so frequently; bowels open; eyes more clear; eruption still apparent. Applicentur Emplayst. lyttæ nuchæ. Pergat. cum medicamentis et balneis u. a.—14th. Eruption quite gone; hoops oftener than before,—twelve times since yesterday; fever less violent; otherwise much better. Applicentur Hirudines duæ fronti. Pergat. *c.* haust. u. a. inter. alia.—17th. Leech-bites bled very well; has hooped only six times since the 14th; head less painful, not so drowsy; bowels open; scarcely any fever; picks her nose frequently.

Case 3.—Edward Harris, æt. one year and two months, (brother of the

preceding patient;) 12th December, 1822. Has been ill of hooping-cough three weeks. Hoops generally three times in the day, and about six times during the night; eyes appear heavy, full of tears, and slightly inflamed; bowels costive; is feverish and thirsty. Bled at the nose about a week ago. Applicentur Hirudines duæ fronti. ℞. Calomel, gr. ss.; Pulv. Rhei, gr. ijss.; Pulv. Ipecacuanhæ, gr. ss. M. ter die sumendus.—14th. Leeches bled freely; has not hooped any since yesterday morning; appears more lively, and eyes are less inflamed: has a considerable discharge of matter from the ears; bowels regular. ℞. Infus. Rosæ, ℥iv.; Magnes. Sulphatis, ʒiv.; Oxymellis Scillæ, ʒvj. M. coch. mod. ter die sumendus.—17th. Has not hooped at all since the 13th; only a slight cough remains; no fever; bowels open; discharge from the ears still continues. Pergat. cum mistura u.a. —22nd. No return of the disease. —Well.

Case 4.—Sarah Bewick, æt. six years; 12th December, 1822. Has been ill of hooping-cough eight weeks. Has about twenty-four fits during the day, and hoops almost constantly at night; brings up blood with phlegm during the attacks of her complaint, and passed some blood by stool last night. Bowels, formerly costive, now open by medicine. Complains of pain of the head; is always very drowsy, and inclined to sleep, and is very feverish at night. Is of a full florid habit of body, and is very stout for her age. Applicentur Hirudines tres fronti. ℞. Calomel, gr. j.; Pulv. Rhei, gr. iij.. Pulv. Ipecac. gr. ss. M. ter die sumendus.—14th. Leeches bled well; has less pain of head, and is not so drowsy; hooping and cough as before, and as frequent; she is often sick; tongue white; bowels open; thirst and fever diminished; complains of oppression at the chest; has not passed any more blood since admission. ℞. Oxymellis Scillæ, ʒiv.; Tincturæ Digitalis, gtt. xvj.; Aquæ puræ, ℥iv. fiat mistura cujus cochleare 4tis horis sumendum. ℞. Magnesiæ, gr. ij.; Pulv. Rhei, gr. iv. M. mane et vespere.—16th. General health improven; hooped twenty times yesterday, from six A. M. to six P. M., but the fits were not so severe or loud as before; not so sick, though she still vomits; bowels open; appetite better; breathing much easier, but has still fever at night. Applicentur Hirudines duæ fronti. Repetatur Pulv. ut 12ma. ter die. Int. mistura.—19th. Leeches bled well; cough continues bad at night, but it is not always accompanied with a fit of hooping, as was constantly the case before; hooped sixteen times yesterday, from six A. M. to six P. M., and much oftener at night; no head-ache or drowsiness; tongue clean; bowels open; breathing natural, and feels no oppression at the chest; appetite improved, and feels much better in every respect. ℞. Infusi Rosæ, ℥iv.: Oxymellis Scillæ, ʒiij.; Magnes. Sulphatis, ʒiv. M. fiat mist. cujus cochleare 4tis horis sumendum.—21st. Hooped yesterday eighteen times, from six A. M. to six P. M., and coughed seven times; bowels open; is quite lively in appearance, and sleeps much better than formerly, being less frequently disturbed with the hooping at night: no other complaint. Applicentur Hirudines duæ fronti. Pergat, cum mistura u.a. —24th. Only one leech bit, which bled very little. Hooping no better, and cough is very troublesome; vomits frequently. Applicentur Hirudines duæ pone aures. ℞. Calomel, gr. j.; Pulv. Rhei, gr. iv.; Pulv. Ipecacuanha, gr. ss. M. bis die sumendus.—26th, 1 P.M. Leeches bled profusely; has only had twelve fits of hooping since yesterday morning at six till now; cough much better; no fever; quite well in other respects. Applicentur Hirudo fronti. Pergat. cum pulvere u.a.—28th. Leech bit well, and bled freely; no hooping whatever since; is quite free from complaint. Intermittantur medicamenta.—31st. Discharged cured.—10th January, 1823. Continues well.

Case 5.—James Anderson, æt. one year and eight months; 12th December, 1822. Has been ill of hooping-cough seven days. Hoops about twelve times during the day, and very often at night; eyes watery, and he appears drowsy; head feels heavy to the mother; great difficulty of breathing, and is oppressed at the chest; bowels very costive, and is very feverish at night. Applicentur Hirudines duæ fronti, ℞. Calomel, gr. j.; Pulv. Rhei, gr. ijss.; Pulv. Scillæ, gr. $\frac{1}{3}$ M. ter die sumendus.—14th. Leeches were, by mistake applied on the temples, but they bled very well; has great difficulty of breathing, and suffers much from oppression at the chest; coughs very frequently, but has not hooped above four times since yesterday morning till now. Applicentur Emplast. lyttæ sterno. ℞. Infusi Rosæ, ℥iv.; Oxymellis Scillæ, ʒv.; Magnesiæ Sulphatis, ʒiv. Fiat mistura, cujus cochleare modicum 6tis horis sumendum. Pergat. pulv. *c.* u.a. *c.* Magn. gr. j. loco Calomel.—17th. Cough still very troublesome; has only hooped three times since yesterday; head much better, and less red and watery; pectoral symptoms better, but fever considerable; bowels open. Applicentur Hirudo fronti, Pergat. cum mistura u.a. ℞. Potassæ Nitratis, Pulv. Rhei, āā gr. ijss.; Pulv. Ipecacuanhæ, gr. ss. M. bis die sumendus.—25th. Leech bled well on the 17th; scarcely hooped any afterwards, and none since the 21st instant. Cough almost gone; bowels open; otherwise well. Inter. medicamenta.—27th. No complaint; discharged.

Case 6.—Thomas Cole, æt. seven years; 17th December, 1822. Had hooping-cough last summer, for upwards of three months; at the end of which period (in August,) he became a patient at the Infirmary, the disease being still very violent and frequent. Three leeches were ordered to be applied to the forehead, which bled profusely, and a purging medicine was given every night. The hooping ceased almost immediately after the evacuation of the blood, nor did it ever again return; and in less than a fortnight he was discharged free from complaint.

Has remained quite well ever since, till about a week ago, when he began to complain of pain in the head and frequent cough, but he has not been observed to hoop until within these three days. The fits have been during that time most violent, recurring at least every quarter of an hour, as well in the day as during the night; he has complained also of constant pain in the head and forehead. He gets very blue in the face after a fit, and is, by the mother's account, frequently convulsed. Tongue white; bowels open; vomits frequently, and is very restless and feverish at night. Has bled freely at the nose last night, and this morning appears better, though the hooping still remains as frequent and severe as before. Applicentur Hirudines quatuor fronti.—℞. Calomel. gr. ss.: Pulv. Rhei, gr. ijss.; Pulv. Scillæ, gr $\frac{1}{3}$ M. ter die sumendus.—19th. Leeches bled profusely; has not hooped any since: head feels relieved; eyes very watery and swelled. An eruption appeared on the skin this morning, distinct, but not the measles; cough continues very frequent, and he is feverish at night. ℞. Infusi Rosæ, ℥iv.; Oxymellis Scillæ, ʒvj.; Magnes Sulphatis, ʒiv. M. cochl. mod. 4tis horis sumend.—21st. No hooping; eruption gone; fever not so violent; cough troublesome; bowels open; thirst; complains of pain of head, and feels always very heavy, and inclined to sleep; appetite moderate. Applicentur Emplast. lyttæ nuchæ. Pergat cum mist. add. Tinct. Digitalis, ℈ij.—24th. Cough better; complains of constant pain on the right side of the head; breathing a little difficult, and accompanied with wheezing, but feels no pain in the chest; sleeps much better, and eyes are more clear; slightly feverish at night, and is very weak. Pergat, cum mistura add. Vini Ipecacuanhæ, ℈ij. loco Tinct. Digitalis.—

26th. Cough very frequent; pain of head as before, but his spirits are better, and the appetite improves. Pergat, cum mist.—28th. Cough very troublesome; pain of head better; slight accession of fever in the evening, and feels weak and exhausted. ℞. Pulv. Cinchonæ, Sodæ Carbonatis, āā gr. iij. M. ter die sumendus. ℞. Mist, Theriacæ, ʒij. pro re nata inter. alia.—2d January, 1823. Scarcely any complaint; improves daily. Pergat. cum medicamentis, u.a.—6th. Convalescent; discharged.

PROVINCIAL MONUMENT TO DR. JENNER.

At a numerous meeting of MEDICAL GENTLEMEN, held at the King's Head, Glocester, the 22nd day of February, 1823, for the purpose of taking into consideration the best means of testifying their respect for the memory of their lamented countryman Dr. Jenner;—Dr. BARON having been first called to the chair;—The following Resolutions, proposed by Dr. Newell, seconded by J. Shrapnell, Esq. were unanimously adopted:

1st.—That the transcendent discovery of Vaccination demands from this meeting an expression of the highest admiration: while the genius, the judgment, and the caution that guided its great author in his enquiries, and the candour and disinterestedness with which he communicated the result of it to the world, for ever entitle him to the respect and gratitude of his fellow creatures. 2nd.—That in order to express our sense of his merits, a subscription be entered into, for the purpose of erecting a monument to his memory. 3rd.—That, though we, as medical men, have deemed ourselves peculiarly called upon to come forward on this occasion, we by no means wish to limit subscriptions to persons of our own profession, but rather respectfully solicit all who venerate the character of the deceased, to give their assistance, that a memorial worthy of his name may be obtained. 4th.—That his memorial shall be placed in or near the City of Glocester, that being the capital of the county which gave birth to Dr. Jenner, and not far distant from the place where he commenced and perfected his enquiries respecting vaccination. 5.—That this measure is becoming and expedient, independent of any steps which it is hoped may be adopted by parliament, respecting a national monument to Dr. Jenner. 6.—That a committee be appointed to promote the object of this meeting, by opening such communications with other districts, as to them may seem expedient. 7.—That the committee, do for the present, consist of all professional gentlemen residing within twenty miles of Glocester, the same being subscribers; and that they shall have power to add to their number such other subscribers who are not of the profession, as to them shall seem proper. 8.—That as soon as due exertion shall have been made in this cause, and the amount of subscriptions ascertained, a general meeting of the the subscribers shall be convened, in order to determine upon the most suitable method of giving full and lasting effect to the object which has this day called us together. 9.—That Messrs. Turner and Co. be requested to be the Treasurer, and H. J. Shrapnell, to act as Secretary. 10.—That the different Bankers in the couutry be solicited to receive subscriptions, and transmit the same to the Treasurer. 11.—That this Meeting do adjourn to Thursday, the 3rd of April, when all who are friendly to the measure are requested to attend at 1 o'Clock at this place. 12.—That the foregoing resolutions, signed by the chairman, be published in the Glocester and Cheltenham Papers, and in such others as the Committe shall think fit.

J. Baron, M. D. the Chairman having left the Chair,—

Resolved unanimously, That this Meeting do express their thanks to Dr. Baron, for his conduct in the chair.

Subscriptions will be received at the

Banking Houses of Sir James Esdaile, and Co., and Messrs. Drummond and Co., London; and of Messrs. Turner and Morris, Glocester.

N. B. It would further the above purpose if any medical gentleman would collect subscriptions from his professional brethren, or others, in his own immediate neighbourhood, transmitting the same to either of the above banks, with the names of the subscribers.

MELANGE.

BILLS OF MORTALITY,

From December 12, 1821, *to Dec.* 11, 1822.

DISEASES.

Abscess	107
Apoplexy	206
Asthma	533
Bedridden	1
Cancer	82
Chilbed	191
Consumption	3608
Convulsions	2929
Croup	100
Diabetes	3
Dropsy	851
Dropsy in the Brain	324
Dropsy in the Chest	86
Dysentery	4
Epilepsy	2
Eruptive Disease	6
Erysipelas, or Saint Anthony's Fire	17
Fever	1104
Fever (Typhus)	17
Fistula	6
Flux	6
Gout	41
Hæmorrhage	31
Hooping-Cough	757
Inflammation	1308
Inflammation of the Liver	61
Insanity	218
Jaundice	111
Measles	712
Mortification	159
Old Age and Debility	2601
Palsy	169
Rheumatism	8
Rupture	44
Scrofula	7
Small-pox	604
Sore Throat or Quinsey	5
Spasm	55
Still-born	667
Stone	16
Stoppage in the Stomach	16
Suddenly	220
Teething	472
Thrush	102
Venereal	7
Worms	3
Total of Diseases	18577

CASUALTIES.

Broken Limbs	1
Burnt	18
Drowned	113
Excessive Drinking	4
Executed*	8
Found Dead	6
Fractured	2
Killed by Falls and other Accidents	84
Murdered	4
Overlaid	1
Poisoned	3
Scalded	7
Suicide	33
Strangled	1
Suffocated	3
Total of Casualties	288

CHRISTENED.

Males	11968	In all, 23373
Females	11405	

BURIED.

Males	9483	In all, 18865
Females	9382	

Whereof have died,

Under Two Years of Age	4605
Between Two and Five	2033
Five and Ten	932
Ten and Twenty	649
Twenty and Thirty	1348
Thirty and Forty	1905
Forty and Fifty	1995
Fifty and Sixty	1826
Sixty and Seventy	1562
Seventy and Eighty	1224
Eighty and Ninety	680
Ninety and a Hundred	104
A Hundred	1
A Hundred and One	1
A Hundred and Two	
A Hundred and Eight	

Increased in the Burials this Year, 414.

On the use of Iodine.---Iodine has for some time past been frequently employed by the medical practitioners of this place, particularly among the inhabitants of a mountainous district of country, situated a few miles from Cologne, where a considerable number of cases of goitre are met with. I have, along with others, tried its medical effects, particularly in the cases of two sisters; the one sixteen, the other eighteen years old; the former of whom was affected with a small tumor of the bronchocele kind, about the size of a pigeon's egg, situated in the neighbourhood of the thyroid gland; the other had a chronic tumor, of much greater magnitude, situated on the left side of the neck; the swellings in both instances were hard, and quite free from pain. After the use of the iodine for a fortnight, considerable diminution in the size of the tumors

* There have been executed in London and the county of Surrey, 24; of which number, 8 only have been reported to be buried within the Bills of Mortality.

was already observed. During that time the patients had only employed the Ungt. Hydriodin. made thus:---R. Axung. porc. 3 jss. et Kali Hydriodinicum, 3ss. M. et fiat ungt. Of this ointment, about the size of a hazel-nut was rubbed in on the swelling every evening; the iodine not being at all exhibited internally. At the present moment, they still continue the use of the ointment; and I do not in the slightest degree doubt but that the tumors will be discussed without leaving the smallest trace of them, since they are already of very inconsiderable size. During the employment of this application, the patients were not affected with any particular symptom, with the exception of the youngest of the two, who, about the sixth day after she began the application, complained of slight pains in the tumor; but these entirely disappeared in two days afterwards, the use of the ointment remaining uninterrupted. Since then they have not returned.---*(Extract of a Letter from* DR. GUNTHER, *of Cologne, to the Editor of the Medicinisch. Chirurgische Zeitung;* 1st August, 1822.)

Hunterian Society.—The following members of this Society were on the 5th ultimo elected officers for the ensuing year.

President, Benjamin Robinson, M. D. *Vice-Presidents*, William Babington, M. D. F. R. S., H. Lidderdale, M. D., Sir William Blizard, F. R. S., Benjamin Travers, Esq. F. R. S. *Treasurer*, B. Robinson, M. D. *Secretaries*, J. T. Conquest, M. D. F. L. S. William Cooke, Esq. *Council*, Thomas Callaway, Esq., W. D. Cordell, Esq., John Dunstan, Esq. F. L., S. H. Greenwood, Esq., John Winstone, Esq., H. Hawkins, Esq., J. C. Knight, Esq., Lewis Leese, Esq., Eusebius A. Lloyd, Esq., J. Miles, Esq., B. C. Peirce, M. D., J. Roberts, Esq.

On the following day the members and friends of the Society dined together at the London Tavern, on which occasion Dr. Robinson took the chair. The report of the progress of the Society, and of the state of its finances, is encouraging.

OBITUARY.

On 26th December last, at Malta, Stephen Gainsford, Esq. Surgeon in the Ordinance Medical Department.

JUST PUBLISHED.

A new view of the Infection of Scarlet Fever, &c. By W. M'Michæl, Esq. 8vo. price 5s.

A Practical Treatise on the Bath Waters &c. By J. H. Sprey. 8vo. price 13s.

History of the Method and Cure of Epilepsy. By John Cook, M. D. Price 15s.

Thoughts on the present Character and Constitution of the Medical Profession. By T. C. Spur, M. D. 8vo. price 5s. 6d.

Advice to Young Mothers on the Physical Education of Children. By a Grandmother. 12mo.

BOOKS IN THE PRESS.

The Second Edition of Sir A. Cooper's work on Dislocations and Fractures, will be published in a few days.

A Treatise on Mental Derangement, being the Substance of the Gulstonian Lectures, delivered in the Royal College of Physicians, in May 1822. By Francis Willis, M. D. One Vol. 8vo.

Dr. Pring, of Bath, has in the Press, an Exposition of the Principles of Pathology, and of the Treatment of Diseases.

Translation of the 2nd vol. of MAGENDIE'S PHYSIOLOGY.

Miss Aikin is preparing for publication, A Memoir of her Father, the late John Aikin, M. D. together with a selection of such of his Critical Essays and Miscellaneous Pieces as has not been printed before in a collective form. Improved Editions of the most popular of Dr. Aikin's works, are also preparing for the Press, under the care of his family.

NOTICE TO CORRESPONDENTS.

T. S. from Manchester has our best thanks for the communication his Letter contains; but before we send any of his remarks to the press, we must hear from him again.

We thank "Ruminator" for his able comments on the soi-disant Reviewer, *but we trust he will so profit by the potion we have already prescribed him ourselves, as not to stand in need of a repetition of the dose.*

Communications are received from D. Y., D. and L., which we shall notice in due course.

The extracts promised from Guy's Will, are unavoidably postponed for our next number.

In consequence of the encreasing sale and extensive diffusion of the WEEKLY MEDICO-CHIRURGICAL AND PHILOSOPHICAL MAGAZINE, the Proprietors have expressed their readiness to receive *Advertisements* on all subjects connected with the profession; e.g. purchases and disposals of practice in Town and Country, Sales by Auction, Advertisements of New Publications, &c. &c. &c. For further particulars on this subject apply to the Publishers.

All Letters &c. (Post Paid,) addressed for the Editors, at the Publisher's, &c.

Printed by Plummer and Brewis, Love Lane, Eastcheap;

Published by Cox and Son, St. Thomas's Street, and 39, High Street, Southwark. Sold also by Sherwood, Neely, and Jones, Paternoster Row; Simpkin and Marshall, Stationers' Court; Callow and Wilson, Prince's Street, Soho: John Cox, Berner's Street, Oxford Street; W. Stewart, South Bridge Street, Edinburgh; and Hodges and M'Arthur, Dublin.

THE WEEKLY

MEDICO-CHIRURGICAL & PHILOSOPHICAL MAGAZINE.

No. VII. SATURDAY, MARCH 22, 1823. *Price 4d.*

"FLORIFERIS, UT APES, IN SALTIBUS OMNIA LIBANT
OMNIA NOS, ITIDEM, DEPASCIMUR AUREA DICTA."

Injuries of the Spine.—From Sir A. Cooper's Work on Dislocations, &c.

Dislocations of the spinal column are represented by some authors as of frequent occurrence—but Sir Astley suspects that they are extremely rare, as he has never seen an instance of the kind unaccompanied by the fracture of the bodies or processes of the vertebræ. He does not, however, deny the possibility of dislocation, especially of the cervical vertebræ, the articulating processes of which are placed more obliquely than those of the other vertebræ.

The effects resulting from violence done to the spinal chord are very similar to those which are produced by injuries to the brain, viz. concussion, extravasation, fracture, fracture with depression, suppuration, and ulceration.

Concussion.—The effect of this, if in a severe degree, is generally paralysis of the parts beneath; the person often recovering, in a gradual manner, the motion and sensation of the parts. A case is related, where cupping, purging, and instituting a drain from the back, restored a severe injury of this kind.

Extravasation.—A very severe blow upon the vertebræ will sometimes produce extravasion upon the spinal chord but more frequently upon the sheath in which it is contained. Of late years, since it has been the custom, in examining dead bodies, to saw off the spinous processes of the vertebræ, in cases of severe injury, blood has been, several times, found on the outer side of the spinal sheath, and, in one instance, upon the spinal marrow, just above the cauda equina. We shall give the following case entire.

"Master ——, a fine youth aged twelve years, in June 1814, was swinging in a heavy wooden swing, and just commencing the moving forward, was caught by a line which had got under his chin, by which accident his head was violently strained, and the whole of the cervical vertebræ; as however, the line slipt immediately off, he thought no more of it. Subsequently to the accident for some months, he was not aware of any pain or inconvenience, but his school-fellows observed he was less active than usual; instead of filling up his time by play, he would be lying on the school forms, or leaning on a style or gate, when in the fields. They were always teasing him on this account, and, at last, he was persuaded himself, that he must be weaker than he used to be. From this time he continued to decline both in strength and power. About the middle of May following, he came to London. His complaints were occasional pains in the head, which were more severe and frequent about the back of his neck, (where a blister had been applied without relief,) and down his back. The muscles at the back of the head and neck were stiff, indurated, and very tender to external pressure. He felt pain in moving his head or neck in any direction; added to these symptoms, there was a great deficiency in the voluntary powers of motion, especially in the limbs.

"May 18th.—Two setons were made in the neck, and he was ordered various medicine, without any being useful.

"May 29th.—His complaints and the paralytic affection of his limbs, were getting much worse, added to which, he felt a most vehement hot burning pain in the small of his back. This, by the next day, was succeeded by a sense of extreme coldness in the same part. Some time after, the same pain occurred higher up in the back, and then disappeared. Pulse, and heat, natural.

"June 3rd.—A consultation of Dr. Baillie Dr. Pemberton, Mr. A. Cooper, and Mr. Heaviside, was held, and the application of mercury was determined on. The pil. hydr. was taken for a few days, but as it run off by the bowels, mercurial frictions were consequently preferred. He felt his limbs getting every day weaker, but his neck was more free from pain when moved, and he was more capable of moving it by his own natural efforts.

"June 7th.—His respiration became laborious, he passed a bad night, on the following day all his symptoms increased, and at five in the afternoon, he expired.

"*Examination.*—The whole contents of the head were carefully examined, and found perfectly healthy; but upon sawing out the posterior parts of the cervical vertebræ, the theca vertebralis was found overflowed with blood, which was effused between the theca and the enclosing canals of bone. The dissection being further prosecuted, this effusion extended from the first vertebra of the neck, to the second vertebræ of the back, both included.

"The preparation only shews a small proportion of the effused blood which had become coagulated on the theca, as much of it escaped in the act of removal, it being fluid.

The particulars of the above were obtained from Mr. Heaviside, whose splendid museum is ever found open for the good of the profession.

Fracture of the Spine.—These accidents, even when the bones retain their situation, produce very extraordinary symptoms, by admitting unnatural variations in the positions of the spinal column. When there is fracture with displacement, the symptoms differ according to the seat of the fracture. These injuries our author divides into two classes.—1st, those which occur above the third cervical vertebra—and 2dly, where the injury is below that bone. In the *first* class, the accident is almost always fatal, if the displacement be to the usual extent. Death, in the second class, occurs at various periods after the injury. The circumstance of the phrenic nerve taking its origin from the 3d and 4th cervical pair, is the cause of this difference. If the lumbar vertebræ be displaced, the lower extremities are rendered completely insensible—the power of volition is completely destroyed—the sphincter ani loses its function, and the fæces are passed involuntarily. The bladder is unable to contract, and the urine is retained till drawn off by the catheter. Nevertheless, the circulation goes on, though somewhat more languidly, and inflammation can be raised by blisters. It is curious, that priapism is a common phenomena under such circumstances. In general, in fractures of the lumbar vertebræ, patients die in a month or six weeks after the injury. In fractures of the dorsal vertebræ, the symptoms are nearly similar; but the paralysis extends higher, and the abdomen becomes greatly inflated, from the diminution of nervous energy. Death sooner takes place here, than in lumbar fracture—the patient usually sinking in a fortnight or three weeks. "The period of existence is short or protracted, as the injury is near or distant from the cervical vertebræ, and as the displacement is slight or considerable, as well as the degree of injury the spinal marrow has sustained."

"Fractures at the cervical vertebræ below the origin of the phrenic nerve, produce paralysis of the arms, as well as of the lower parts of the body; but this paralysis is seldom complete; if it occurs at the sixth or seventh vertebra, the patient has some feeling and powers of motion, but if at the fifth, little or none; sometimes one arm is much more affected than the other when the fracture is oblique, and the axillary plexus of nerves is consequently, partially influenced. Respiration is in these cases, difficult, and performed wholly by the diaphragm, the power of the intercostal muscles being destroyed by the accident. The abdomen is also tumid from flatulency, as when the dorsal vertebræ have sustained injury. The other symptoms are the same as in fractures of the vertebræ below the cervical, as regards the lower extremities, the bladder, and the sphincter ani. Death ensues in these cases in from three to seven days, as it is seated

in the fifth, sixth, or seventh vertebra. I have scarcely known the subject of this injury to live beyond a week, and but rarely to die on the second day, although they sometimes do if the fifth cervical vertebra has sustained the injury. I have already stated, that in fractures and displacements above the fourth cervical vertebra, death instantaneously follows."

In the dissection of these cases, the spinous process of the displaced vertebra is depressed—the articular processes are fractured—the body of the vertebra is broken through—but, it rarely happens, that the displacement and separation occur at the intervetebral substance. The body of the vertebra is usually advanced from half an inch to an inch—between the vertebræ and the sheath of the spinal marrow, blood is extravasated; and, frequently, there is extravasation of blood on the spinal chord itself. The spinal marrow is compressed and bruised in slight displacements, and is torn through when the injury has been very extensive, the dura matral covering remaining entire. A bulb is formed at each end of the lacerated spinal marrow, which laceration is usually produced by the bony arch of the spinous processes. A very interesting case is related, from the practice of Mr. Harrold, of Cheshunt, where the spine was broken at the lower part of the dorsal, or beginning of the lumbar vertebræ. The principle on which Mr. Harrold proceeded, was to produce union of the bones by preserving the spine in perfect rest; to effect which, the patient was put into a fracture bed, where he had the means of evacuating the bowels without disturbance. The urine was drawn off daily by the catheter, for several weeks, after which he was able to retain and discharge it when he pleased. At the end of six months, the following was the report of his health. His back straight, flexible, and apparently as strong as ever —retains and discharges his urine— has a stool once in three or four days —health and spirits good—but no sensation or voluntary motion in the lower extremities. He died in twelve months from the accident, owing to a sore on the tuberosity of the ischium, and disease of the bone. Sir Astley examined the body with great care, and the preparation is preserved in the museum of the College. The bodies of the first and second lumbar vertebræ had been fractured—the first having advanced, and the second having been forced backwards. The fracture had united by ossific matter, which had spread over the fore part of both vertebræ to a considerable extent, and a little had been deposited upon the dorsal vertebræ. The spinal canal had been much diminished by a portion of bone being forced into it from the first vertebra of the loins. This portion of bone had split the theca vertebralis into two, and divided the spinal marrow almost entirely—a bulbous projection of the latter appearing above and below the bone, formed by its divided extremities, which were separated nearly an inch from each other.

In respect to the treatment of these unfortunate cases, our author has little to offer that is at all consolatory. Rest will be essential to ossific union; but ossific union will not save the patient, if the spinal marrow be not relieved from pressure. The late Mr. Henry Cline took a scientific view of this subject. He considered the accident as similar to fracture with depression of the cranium—and to require the removal of that pressure. He, therefore, thought himself justified in making an incision upon the depressed bone, as the patient was lying upon his breast, —he then raised the muscles covering the spinal arch, and applied a small trephine to the arch, cutting through it so as to remove the spinous process, and the arch pressing on the spinal marrow. The case did not succeed; and, unfortunately, he did not live long enough to prosecute the practice. The operation has been lately repeated by Mr. Tyrrel, at St. Thomas' Hospital, and, also, without success. We are convinced that the fatal issue, in both

cases, was owing to the extent of the injury done to the spinal marrow, and not to the operation, which, we think, offers the best, or rather the only chance of success. Whether the operation be ventured on or not, cupping, leeching, blisters, and the proper antiphlogistic measures, will be indispensible till the fever subside, and then a drain should be established near the part, to obviate the effects of local inflammation. *Med. & Chirurg. Review.*

MEMOIR.

(Continued from page 69.)

For this latter office, Dr. Gordon's previous acquirements eminently fitted him, and it is often one of considerable difficulty and importance. The simple exhibition indeed of a morbid part is frequently a matter of no great difficulty; but to display it, when distorted by disease, in the manner that shall best exhibit its altered state;—to be able accurately to compare this state with that of the same part in health;—to trace minutely the changes of structure it has undergone, and discriminate truly between appearances merely casual, and those which result from morbid causes—these require not only an experienced eye, but a practised hand, and a mind ready and sagacious in extracting, from the appearances observed, the true indications they afford. Physicians, for the most part, are so much occupied with *general* notions of disease, and have so slight an acquaintance with practical anatomy, that they are apt to undervalue, or unable fully to appreciate the information which morbid dissections supply; yet the success and reputation of Morgagni and Lieutaud in former days, and of Baillie and Farre in our own, may suggest, that not the profession only, but the public also, know how to appreciate such labours. Too often indeed, it must still be confessed, morbid dissection fails in affording the information expected from it; for, sufficient as our knowledge of anatomy may have become for the purposes of the operative surgeon, the physiologist and pathologist must continue to lament its imperfections, considered in relation to the functions of the system in health and disease. Nevertheless, a deep sense of the importance of morbid anatomy, to the improvement not only of practical medicine, but of physiology, rendered Dr. Gordon always eager to embrace opportunities of morbid dissection. How much to the satisfaction of his colleagues in the Infirmary, he performed this duty, may be learned from the honourable tribute rendered to his memory by Dr. Duncan, junior, in his late valuable 'Reports of the practice in the Clinical Wards of the Royal Infirmary of Edinburgh.'—'The dissections contained in the Appendix to these Reports,' says Dr. Duncan, 'I consider very valuable. To me they are particularly interesting, as being the last fruits of my professional intercourse with the late Dr. John Gordon, whose zeal and science as a pathological anatomist, qualified him so eminently for the situation he filled in the Hospital, and whose private virtues made him most beloved by those who knew him best.'*

From the time that Dr. Gordon began to lecture on Anatomy, he resolved to endeavour to supply a want, which he had himself felt as a student of that science. This was an accurate and scientific elementary work on Anatomy, which should not only exhibit a full view of the science as taught in this country, but embrace also the latest discoveries and improvements of the Continental Anatomists. To say nothing of the information to be found in the various detached Essays published on the Continent, we have no elementary work, which, in point of extent and accuracy, can be compared with those of Mayer, Hildebrandt, Loder, Sommerring, Portal, or Bichat. To select, arrange, and combine the valuable materials contained in the writings of these, and other Continental Anatomists, and, as far as possible, to verify their accuracy and make them his own by the most minute and scrupulous investigation, was the unceasing object of Dr. Gordon's labours. All his dissections, with this view, were made with the works of the best systematic authors lying before him; and, in addition to these, he had constant recourse to the particular works of Albinus, Haller, Meckel, Wrisberg, Prochaska, the Wenzels, Reil, Mascagni, Scarpa, &c. authors whose discoveries and improvements have not yet been fully incorporated with British anatomy.

In prosecution of this design, Dr. Gordon published, in the year 1815, the first volume of a work, entitled, 'A System of Human Anatomy.' The descriptions and facts contained in this volume, he states to be, in most instances, the result of observations and experiments made directly on the human body by himself; but as to those subjects which he had not hitherto enjoyed opportunities of investigating to his own satisfaction, he has referred to the observations of others, on whose accuracy he placed the most reliance. The work throughout, is purely anatomical, without any admixture of physiological matter; and was intended, by the author, as a manual for his Public Lectures.

In a short introductory chapter, the author gives, what he considers, a just distinction between bodies called Living and

* Reports, &c. p. 51. Edinburgh, 1818.

Dead. Those bodies he regards as Living, in which a certain appropriation of foreign matter is going on; and those as Dead, in which this process has either ceased, or never existed. Living Bodies, as every one knows, are divided into two great classes, Animal and Vegetable;—those being, in a general way, denominated animal, which appear capable of sensation and ideas; and those vegetable, which do not seem susceptible of these phenomena.

He next proposes to denominate the science which treats of Living Bodies, VITAL ECONOMY; which divides itself into two parts, *Animal* Economy, and *Vegetable* Economy; each of which comprehends two distinct objects of investigation, Anatomy and Physiology. Animal Anatomy is further divided into Human and Comparative, or that which treats of man only, and that which compares the structure of animals with each other, and with man. The work before us was confined to Human Anatomy alone.

The arrangement adopted in this work differs, I believe, from any that has preceded it in this country. The human body, as is well known, consists of a vast variety of organs, which in form, size, and structure, differ essentially from each other. These diversities however arise, not from differences in the simple or elementary parts which compose them; but chiefly from the varied modes and proportions in which these parts are combined and arranged. The primary parts themselves are few in number, and common to almost all the compound organs; and hence the author proceeds to exhibit, in the first place, a general account of them. With this view, he divides the materials of this volume into two parts—the *first* of which treats of the External Form, the Stature, and Weight of the body;—and the *second* delivers the anatomy, in general, of the Common Systems and Common Textures.

By the common systems, are understood those three great elementary parts which enter into the construction of particular organs, and are usually denominated the Vascular, the Absorbent, and Nervous systems. Under these heads, therefore, the author treats successively of the heart and blood-vessels—of the absorbent vessels, and the glands attached to them—and of the brain, the spinal cord, and the nerves.

(To be continued.)

PHYSIOLOGICAL OBSERVATIONS.

Magendie on Vomiting.

(Continued from Page 88.)

It might therefore be presumed that the air, which in this manner distended the stomach during the nausea*, got into that viscus by the œsophagus; but, to set myself right on this subject, I applied a ligature to the stomach, close to the pyloric orifice, so as to shut up all communication between the organ and the small intestine, and I made a dog swallow six grains more of the emetic tartar, in powder. For once, vomiting did not occur for a good half hour; when it presented precisely the same phenomena. The swelling of the stomach was at least as well marked as in the preceding experiment; besides, there was not the least trace of any contraction having taken place in the stomach; its peristaltic motion was not even perceptibly distinguished. The animal was afterwards made use of for another experiment, which caused its almost immediate death, but which had no relation with the action of vomiting. We then examined the abdomen, and we perceived that the stomach had considerably increased in size; the texture of which was flaccid and by no means contracted. The ligature placed near the pyloric orifice was not disturbed; consequently the air could not have passed in in this direction. I shall dwell no longer in this place, on this introduction of air into the stomach; but I purpose to return to the subject in a particular Memoir on Deglutition. I repeated the same experiment on another dog, nearly of the same age and weight, and I obtained equally the same results. These two experiments perfectly coinciding with the experiments of Chirac and Duverney, I conceived myself justified in supposing that the mechanical pressure exercised on the stomach, by the diaphragm and abdominal muscles, had great weight in producing vomiting. If this then be the case, I observed, that by removing

* By nausea, I not only mean the inclinations to vomit, but the sensible phenomena denoting this desire, and which constantly precede vomiting in man and animals. I have only therefore extended the acceptation of the word nausea here, in order to avoid circumlocutions.

this pressure from the stomach, vomiting ought not to take place. I resolved upon making the experiment upon a young spaniel;—I injected into the vein four grains of emetic tartar, dissolved in two ounces of common water. (This is preferable to the introduction of the emetic into the stomach, as it has the effect of producing instantaneous vomiting, whilst it is sometimes times necessary to wait an hour by the other means.) After having then injected four grains of the emetic powder into the jugular vein of the dog, I made an incision into the parietes of the abdomen, and at the very moment that vomiting came on, I drew the whole of the stomach quickly out, which nevertheless did not prevent the vomiting efforts from continuing; the animal made absolutely the same efforts as if vomiting had actually taken place but nothing was ejected from the stomach; the organ remained completely motionless. I then wished to see what would be the effect of pressure applied to the stomach; for this purpose, I placed my right hand on the anterior surface of this organ, and the left on the posterior. Scarcely had the pressure commenced, than the vomiting efforts, that is, the contraction of the diaphragm and abdominal muscles began again with considerable force; I suspended the pressure; the diaphragm and abdominal muscles soon suspended their contraction: I renewed the pressure; the muscular contraction recommenced; I suspended it again—they ceased; and thus I continued successively for seven or eight times, so that I no longer doubted the pressure with the contraction of the abdominal muscles and diaphragm. The last time I applied a strong degree of continued pressure, which produced real vomiting; part of the contents of the stomach being evacuated. This experiment was renewed on another dog: I observed the same facts; I only further remarked that contraction of the abdominal muscles and diaphragm might be excited by simple traction on the œsophagus. In another experiment, I produced vomiting by pressure on the stomach, without having previously administered an emetic to the animal.

(To be continued.)

Heads of MR. GRAINGER'S *Oration on Injuries of the Brain, Mind and Matter, &c.*

(Continued from Page 86.)

Having concluded his observations relative to concussion of the brain, and the subsequent mode of treatment, Mr. Grainger made the following remarks on the grand question, viz. on the combination of mind with matter.

He commenced, after the manner of all good christians, by expressing his surprise, that any man in his senses, and possessing the power of thought, &c., and could contemplate the works of God in his creative office, and especially when viewing that noble structure man himself, should be drawn into the conclusion that the soul is of a material essence, and that it is equally capable of decay with its perishable tenement, the body.

"When I view these things, it astounds me with wonder and admiration. When we draw our mind to the contemplation of its own power, and see with what majesty it can soar into the sublime, and back again into the caverns of dark abyss; who, for a moment, can believe that the soul is meant only for a transitory existence. This discussion, I am aware, has been carried on with the greatest warmth on both sides of the question; yea, with ill names and epithets. But surely such passions will never be suffered to arise within these walls, where men of talent and discernment are assembled, &c.

Mr. Grainger then informed the Society in direct terms, that he believed in the souls immateriality, for which he had "reason to thank God."

"My opinion, said he, arises from the firm conviction of the truth of this assertion. It would be far from my

intended purpose to enter into a discussion of the various theories and opinions published and asserted to the world for and against the substantiability of the present argument, which, were I inclined, our present limits would by no means permit, independent of its being likely to lead to endless metaphysical controversy; and where is the mind that has once entered the chaos of the Almighty?

In the first place, my belief in the immateriality of the soul is the result of observations on the gradual increase of the mental powers in animals, as the body increases; *and secondly*, from observations on the powers, which the mind of man possesses, in thinking acting, scheming, and planning for itself. Some men believe that the perceptive faculty depends upon the quantity of the medullary matter which is found in the brain; and others again acknowledge that it originates * *. The following authors have written on the materiality of the soul;—Bentley, the Bishop of Cologne, Priestly, Price, Reid, &c. Dr. Priestly believed that matter was divisible, impenetrable, inert. Dr. Baillie denied the existence of matter altogether. Ancient philosophers asserted, that Jupiter threw a handful of matter for souls to catch at, by which means the world became peopled. Priestly believed that there were numerous spheres composing the habitable globe, and that these spheres attracted and repelled each other, by that means forming man. * * * * * * * * * A simple question arises here relative to such a creed; viz. what is the cause of this attraction and repulsion? There must be something. He (Priestly) declares in one work, that there is nothing like matter, and yet he believes that an intellectual mind may be produced by the combination of the spheres. In another of his books he says, that the works of the world were once shut up in a nut-shell. * * * * * * * * These are among the opinions of some of the most eminent men and philosophers of latter ages; and, that the whole mass of matter consists of a large but definite number of these systems, the planets and all the Heavens which it pleased God to make. * * * * * If the globe be matter, it must have some power to preserve it in action. By striking a body, and thereby giving it motion, conveys some idea of the continual movement of the earth. Matter of itself is inert; how then can any arrangement of this inert substance form and give a thinking mind. We see an immense mass of matter, but nothing like thought is seen existing in it. Thought, I assert, does not arise from material organization. The materialist however, says it does, and adduces as his proof, that it exists only in organized bodies. Ask the materialist for a single atom of manhood, any self-acting power; such, for instance, as a leg, an arm, &c. As the compounds then cannot be different from the particles by which it is formed, it cannot of itself exert the power of thought, but must have a something independent of matter, which causes it to will, to think, &c.

There are some who deny the existence of matter, and have recourse to Dr. Baillie's opinion. * * * If the combination of the spheres be capable of thought, then one sphere must possess that faculty in a separate degree, &c. &c.

"If we observe the changes that are continually going on in the human body, we shall find it impossible to account for them. The mind is immaterial, and it requires immateriality itself to describe it." Mr. Grainger here cited a number of cases where the brain had laboured under disease without the mind being affected. Dr. Johnson composed the Lord's Prayer in latin, when under delirium, &c. Sir. J. Pringle in his diseases of the army, relates a case of abcess in cerebro. Haller mentions several cases of cerebral abscess, and yet the power of thought remained. Many other similar cases might be adduced from Morgagni, &c.

"I am led to believe that the mind does not depend on the brain. * * If the observations already mentioned be correct, it would be difficult to assign any belief to the doctrines of craniology; and I certainly express my doubts that certain prominences of the cranium evince particular passions; although I am of opinion the matter requires serious consideration. To observe the power of the half-reasoning elephant, and the faithful dog that follows his master by the scent, &c.—this instinct is formed in matter;—but how different is this from the mind of man?

"The materialist may here ask what is mind? My answer is, *that mind does not come within the cognisance of man; it can only be known to the great Creator.* From what has been said, it follows that matter may be moulded into various forms by God; and that the body may suffer by disease, age, &c., but the material spirit cannot be changed:—"nature speaks aloud in all her works." It is really lamentable that there are men who should disbelieve the immateriality of the soul;—such deluded mortals are to be pitied, with the idea of entire annihilation before them; whilst the immaterialist is consoled and comforted with the hope and comfort of a glorious hereafter, &c. &c.

**** *We regret, (had our promise not compelled us) to lay before our readers such a mutilated detail of the excellent Oration in question; an Oration that does much honour to the head, talents, and unaffected candour of the Orator; but, in consequence of the greater part of it having been trusted to verbal memory, &c., not at all times the most faithful recorder of elapsed incident, we plead an apology on this score; as well as to guard against any impression of the present unconnected sentences, resembling in any respect, the free, fluent, and impressive manner in which the original was delivered.*

HOSPITAL REPORTS.

"There is at present, (says our correspondent) in the Edinburgh Infirmary,* a case of catalepsy, the apoplexic cataleptica of Cullen. The disease had existed six weeks when the patient was admitted.—The cause not obvious. The paroxysms are very frequent and sudden in their approach. During the fit, the muscles possess considerable contractile power, and remain in whatever posture they are placed, till the paroxysm subsides, which generally recurs in a few minutes. During the intervals, there is considerable head-ache, but in other respects the patient is in tolerable good health. It may be remarked that the patient is a young and plethoric girl of the sanguineous temperament. The pupils of the eyes are perfectly sensible during the fit; and the muscles of the eye-balls and eye-lids have the natural action, and they are put into violent action when the eye-lids are opened for the purpose of inspecting the eyes, which are also rolling about apparently by a voluntary act. The pulse and respiration are not materially affected.—Bowels rather slow. To the above symptoms have latterly been added some hysterical affections, such as violent convulsions of the body, crying, &c. And although, when the patient was admitted the disease was considered perfectly involuntary, it has since put on somewhat of an equivocal appearance." Our correspondent further adds, that he has been in the room when the patient was perfectly sensible and quiet, but in a few minutes the fit would come on again.

* *In our last number we stated, though incorrectly, that it was at this Infirmary where Mr. Liston operated for the large tumour weighing Forty-one pounds. We are since informed that Mr. Liston has no connexion whatever with the Infirmary, consequently could not perform an operation there.*

LONDON HOSPITAL.

March 13th.

OPERATIONS.

Removal of the internal half of the breast from a female; tumour of a cancerous nature; patient doing extremely well. Operator, Sir Wm. Blizard.

15th. Two cases, both females and elderly, of strangulated femoral hernia. Operations performed by Mr. Headington. *Observations.*—The hernial sacs contained no fluids; and in one subject a small portion of omentum was detached; both cases doing very well.

*** The case of amputation alluded to under this head, last week, is going on well.

ST. GEORGE'S HOSPITAL.

March 19th.

The operation for strangulated scrotal hernia, mentioned in our last, under this head, was performed by Mr. Gunning; the hernia had been an epiplocele of long standing, but a small portion of intestines having protruded and becoming strangulated, the operation was had recourse to; the omentum, which had formed strong adhesions, was not attempted to be returned, the man is now well.

The patient whose subclavian artery was tied as we reported in our last number, died on the Thursday morning following the operation. The arm of the affected side maintained its natural warmth and usual appearance till death; but the right became vesicated, and assumed the types of mortification. On examination after death it was found that the artery alone was included in the ligatures, and we noticed that the tied vessel contained a coagulum forming a kind of plug; (this our readers are aware has been a disputed point) the viscera appeared healthy, the parietes cordis perhaps rather more flaccid than is ordinarily the case.

ST. THOMAS'.

March 21.

AMPUTATION of the left arm, about one-third down below the shoulder joint, by Mr. Green. This case was an accident, occasioned about six weeks ago, by lifting a shutter, the weight of which snapped the bone in two. Union was attempted but did not succeed, and disease manifested itself so rapidly that no other resource was left. On dissecting the member after the operation, it was ascertained that the cancellated structure of the bone had been diseased before the accident, to which may be attributed the non-union of the ends of the bone; a slight ligamentous union was, however, observable on one side, &c. the joint was not included in the diseased part, which, on being opened presented its natural appearance, notwithstanding the destructive ravages in its immediate vicinity.

Mr. Travers removed a small fatty tumour from the cheek of a young woman.

---

*Uterine Hæmorrhage.**—Although it be a general truth, that uterine contraction secures from uterine hæmorrhage—and that the uterus is contracted when it feels small, round, and firm; yet the attentive practitioner is occasionally struck by the disproportion that exists between the want of contraction and the degree of hæmorrhage—a bulky uterus being often free from discharge—and there being, sometimes, a profuse flow when the uterus is small and contracted.

"Nay, further, I have witnessed a profuse hæmorrhage though the uterus had contracted in the degree which commonly indicates security; and I have ventured to do what is seldom justifiable, separate the placenta before the uterus had contracted, without more hæmorrage than after a common labour. What is this circumstance which has so great an influence that its presence can cause a moderately contracted uterus to bleed profusely, and its absence can cause an uncontracted uterus to bleed scarcely at all?"

Experience has taught our author that, there are two circumstances in

---

* An Account of some Circumstances in which a Uterine Hæmorrhage may occur sufficient to produce alarming symptoms, though the uterus feels contracted in the ordinary degree. By ROBERT GOUCH, M.D. —*Med. Chir. Transactions, Vol. XII. Part I.*

which a hæmorrhage may prove alarming, though the uterus be contracted.

1st. The effects of uterine hæmorrhage are comparative in different constitutions. If some people, who are prone to syncope, loose rather more blood than usual, it will affect the constitution as much as a profuse hæmorrhage will others—this trifling excess not being indicated by any thing unusual in the size of the uterus.

2dly. After delivery, in general, uterine contraction prevents hæmorrhage, by closing the mouths of the vessels so as to resist the *ordinary* momentum of the circulation. But if this momentum be *extraordinarily* great, it is reasonable to suppose, that it might overcome the common occlusion of the vessels even in a contracted uterus.

The two positions above stated, are elucidated by cases. The following is illustrative of the first position. Dr. G. delivered a lady of her first child, the labour being short and easy. About ten minutes, *post partum*, the uterus felt round, firm, and of the usual size. In this state of things, she suddenly exclaimed that she was going to faint, (being accustomed to it,) and, in a minute afterwards, she did faint. For a long time, she continued alternately reviving and sinking—" a state which the most experienced cannot watch without painful anxiety." Dr. G. does not give the sequel, but we conclude, of course, that recovery took place.

In some constitutions the syncope is the accidental effect of an exhausting labour, and is accompanied by that powerless and agitated state of the vital functions, termed " nervous irritation"—cases in which the best cordial is an opiate. We shall insert the following case in the words of our author.

" I was attending a lady, thirty-six years old, in her first labour,. Of her mother and three daughters, all but one, have, in their first labours, been delivered with the forceps. She had a severe and protracted labour, and no longer feeling justified in postponing the delivery, I applied the forceps. The external discharge was not greater than usual; the uterus, after the removal of the placenta, felt rather, but not very, large. She had not been tranquil since the extraction of the child, but about twenty minutes afterwards, her appearance alarmed me greatly. Her heart beat with indiscribable rapidity, her pulse was countless, she breathed so quick and short, that, to use her own expression, if it became quicker and shorter, she should not breathe at all, and she felt as if she was dying.

" I had two duties to perform; one, to take care that the symptoms were not kept up, nor caused by internal hæmorrhage; the other, to administer what I thought most likely to tranquillize these alarming symptoms. I passed my hand into the uterus; it contained a good deal, I guess a pound and a half, of coagulated blood; I scooped it out with the hollow of my hand. There was no occasion to irritate the uterus to contract; the instant it was empty it shut like a spring, and when I put my hand on the outside, I found it not more than half its previous size, but the symptoms continued as alarming as ever. I now gave her a dessert spoonful of Hoffman's æther, and fifty drops of laudanum, and then sent off for the family physician. When he arrived, the symptoms had abated so much, as to relieve me from my anxiety; the pulse was slower, the breathing more tranquil, and she felt disposed to sleep. She continued to sleep nearly two hours while we remained in the house, then awoke for a few minutes, slept well through the night, and awoke the next morning without any vestige of her symptoms, sensible to herself; but her pulse continued frequent for many days."

In illustration of the 2d position, (extraordinary momentum,) the following case is related. On the 10th of April, 1816, Dr. Gooch delivered Mrs. S. of her second child. For many hours before the accession of labour, she was flushed, and had a quick pulse.

This state was diminished, but not removed, by proper means. It continued for some time *post partum.* Ater the removal of the placenta, the uterus felt, in the hypogastrium, contracted in the ordinary degree; yet, in twenty minutes afterwards, there came on one of the most frightful hæmorrhages he ever witnessed. By the introduction of the hand, and the application of cold, it was speedily arrested.

More than a year afterwards, the same lady came to town to be confined, and Dr. G. did not see her till she was in labour. On entering the chamber, he was struck with the same state of the circulation that had preceded her former accouchement—"she was sitting in her easy chair, with a red face and a throbbing pulse." In a few minutes the pains increased and it was necessary to put her to bed. The child was soon expelled, but gradually. The uterus contracted in the usual degree, yet, in a few minutes afterwards, the blood burst out with prodigious impetuosity, and gave rise to a fearful scene. The introduction of the hand, and the application of cold, speedily arrested the hæmorrhage. For many days afterwards, she could not sit up without faintness.

Our author wisely considered, that if she again became pregnant, it would be prudent to take such measures, before her accouchement, as might cause her to fall in labour with a cool skin and a quiet pulse. In twelve months afterwards, she informed our author, that she was five months gone with child. He advised her to avoid fomented liquors—to take meat only thrice a week—a purgative of salts and senna twice a week—a scruple of nitre thrice a day. This plan was to be begun two months before confinement. Our author saw her four days before her accouchement, and was gratified to find her with a cool skin and quiet pulse. Yet the former inflammatory state recurred, the same as before, for forty-eight hours before labour. The child was gradually expelled—the uterus contracted—but the hæmorrhage came on in a few minutes. It was, however, trifling, compared with the former attacks, and was easily suppressed by wetted napkins to the belly. In process of time, she again became pregnant, and to the precautionary means above described, she was twice moderately blooded, a little before confinement. Her labour, this time, was unaccompanied by flushing or quickened circulation, and no uterine hæmorrhage ensued.

Our experienced and intelligent author has met wlth other instances, similar in kind, though less striking in detail. He has seen a strong cordial, given unnecessarily towards the conclusion of a labour, excite inordinate action in the heart and arteries, the consequence of which was a flooding after the separation of the placenta, though the uterus was contracted in the ordinary degree. On the other hand, he has ventured to separate the placenta, while the uterus remained largely dilated; but the circulation being languid, no more blood was lost than after an ordinary labour.

"How often a disturbance of circulation plays an important part in uterine hæmorrhage it is difficult for an individual to know; but I suspect sufficiently often to deserve the especial attention of practitioners. I advise them when they meet with patients subject to hæmorrhage after delivery, to notice the state of the circulation before labour, and, if disturbed, to employ means for tranquillizing it before labour comes on. I advise them during labour, to use cordials cautiously, lest the placenta should separate during an excited state of circulation. I advise them after delivery, though the uterus may feel contracted, to be slow to leave their patient, if the circulation be greatly disturbed."

Dr. Gooch alludes to the important subject of a contracted uterus becoming relaxed, and thus giving rise to hæmorrhage. The states of contraction and relaxation may, and do alternate,

with corresponding cessations and recurrences of hæmorrhage. Thus, the first time he attended the lady, whose case has just been related, the bleeding returned again and again, although the abdomen had been covered with pounded ice—the uterus, at one time firm and distinct, becoming at another, so soft as no longer to be felt.

"Finding the ice so inefficient, I swept it off, and taking an ewer of cold water, I let its contents fall from a height of several feet upon the belly; the effect was instantaneous; the uterus, which the moment before had been so soft and indistinct as not to be felt within the abdomen, became small and hard, the bleeding stopped and the faintness ceased; a striking proof of the important principle, that cold applied with a shock, is a more powerful means of producing contraction of the uterus, than a greater degree of cold without the shock."

After the second labour, and at the beginning of the hæmorrhage, Dr. G. found the placenta separated and lying in the vagina. He removed it—the hæmorrhage abated, but returned in a few minutes. He took several handkerchiefs soaked in vinegar, and passed them, one after the other, into the vagina, so as completely to plug it. This prevented all external hæmorrhage, and some uterine pains came on. But presently the pains ceased, the uterus softened and enlarged, and she turned ghastly pale. It was now evident, that an external, had been merely converted into an internal hæmorrhage. He withdrew the handkerchiefs, and applied his hands in the manner described in the following extract, with perfect success.

"My belief now is, that when hæmorrhage occurs after the removal of the placenta, the quickest way to stop it, is to introduce the left hand closed within the uterus, apply the right hand open to the outside of the abdomen, and then between the two to compress the part where the placentia was attached, and from which chiefly the blood is flowing. When the hand is introduced merely as a stimulant, there is an interval of time between its arrival within the uterus and the secure contraction of this organ, during which much blood is often lost. By directing the hand to the very vessels from which it issues, and compressing them as I have described, this quantity is saved. If I may judge by my feeling, the blood stops, in a great degree, even before the uterus contracts; the hand acts first as a tourniquet, then as a stimulant. It is true we cannot tell with certainty where the placenta was attached, and consequently where the pressure should be applied; but as it is generally attached to or near the fundus, if the pressure be directed there, it will generally be right. Besides, after the child is born, it is often several minutes before the placenta separates and descends; if, during this interval, we pass up the finger along the chord and observe at its entrance into the uterus, whether it turn towards the front, the back, the right or left side, or straight up to the fundus we shall form a tolerably exact idea of the spot to which the placenta has been attached in this individual case.

Dr. Good does not consider it necessary during syncope, in such cases, to delay introducing the hand until the patient revives. On the contrary, he introduces the hand, and endeavours to stop the blood, and induce contraction, before giving cordials or stimulants internally.

HOOPING COUGH.

(Continued from page 28.)

Case 7.—Charles Forest, æt. one year and four months; 24th Dec. 1822. ill about a week, with frequent cough; has hooped, for the last four days, about five times in twenty-four hours. Had lately a discharge of matter from both ears, and is affected with a sore at the angle of the mouth. Discharge from the ears has ceased a few days ago, since which he has begun to hoop:

had two fits of hooping yesterday, and three in the night. He appears heavy about the eyes and head; breathes easy, and expectorates very little: is thirsty and feverish; bowels costive; never bled any at the nose. The mother cannot account for the origin of the disease, not being aware of her child's having been ever exposed to infection. Applicentur Hirudines duæ fronti. ℞. Calomel, gr. ss.; Pulv. Rhei, gr. ijss.; Pulv. Ipecac. gr. $\frac{1}{3}$. M. ter die sumendus—26th. Leeches bled very well; no hooping whatever since; cough still very frequent; expectorates phlegm; breathes easy; bowels open; urine red and plentiful; passes restless nights, and sleeps ill. ℞. Infusi Rosæ, ℥iv.: Magnes. Sulphatis, ʒvj.; Oxymellis Scillæ, ʒvj. M. cochleare modicum 4tis horis —31st. Hooping again returned on the 29th: has now a fit of the disease at least every hour; bowels open; is not feverish. Applicentur Hirudines duæ fronti. Pergat. cum mistura u. a.—4th January, 1823. Leeches bled profusely; has only hooped three times since: the last fit on the 1st instant; cough frequent; is much troubled with a copious discharge of mucus from the nose; no fever; bowels costive. Pergat. cum mistura, et repetantur pulv. ter die, ut 24th ult.—7th. No hooping whatever since the 1st instant. Convalescent; discharged.

Case 8.—Elizabeth Ryner, æt. four months; 31st December 1822. Ill a month; has generally about six fits of hooping, sometimes very violent, in twenty-four hours; gets blue in the face after them; eyes hydrocephalic; bleeds at the mouth; cough very severe; bowels natural; tongue white; feverish at night, and vomits frequently. Has not used any medicine. Applicentur Hirudines duæ fronti. ℞. Cal. gr. ss.; Pulv. Rhei, gr. ij.; Pulv. Ipecacuanhæ, gr. $\frac{1}{3}$. M. ter die sumendus.—4th Jan. 1823. Leeches bled very well; has only hooped once since, (on the 2d inst.) coughs frequently; breatheseasier, and still expectorates phlegm; less fever; bowels open four times a-day; is always very sleepy, but the eyes are now quite shut during sleep, and more clear and natural in appearance. ℞. Magnes. gr. j.: Pulv. Rhei, gr. ijss.; Pulv. Scillæ, gr. $\frac{1}{5}$ M. ter die sumendus, inter. alia.—7th. Scarcely any complaint, except a slight cough. ℞. Mist. Oxymellis Scillæ, ʒij. pro re nata.—10th. Cured; discharged.

Case 9.—Abigail Hancock, æt. nine years; 31st December, 1822. Ill of hooping-cough about fourteen days: hoops generally twelve times in the day, but not so often at night; complains of pain over the eyes and in the forehead; feels much difficulty of breathing, and has frequent cough; pulse 106; tongue very much furred; bowels open only by medicine; has lately bled at the nose. For a week previous to the appearance of the disease, the mother said the child complained of head-ache, and appeared very heavy about the eyes. Applicentur Hirudines quatuor fronti, ℞. Calomel, gr. j; Pulv. Rhei, gr. iij.; Pulv. Scillæ, gr. $\frac{1}{2}$ M. ter die sumendus.—2d January, 1823. Leeches bit well, and bled profusely; has not hooped any since; no pain of head: complains still of difficulty of breathing, and of pain in the chest, but less so than before; tongue white; bowels open; coughs frequently. ℞. Infusi Rosæ, ℥iv.; Oxymellis Scillæ, ʒvj.; Magnes. Sulphatis, ʒiv. M. coch. 4ter. in die sumenda. ℞. Potassæ Nitratis, gr. iij.; Pulv. Rhei, gr. iv.; Pulv. Scillæ, gr. $\frac{1}{2}$ M. bis die sumendus, inter alia. —4th. Scarcely any complaint, except difficulty of breathing and slight cough, with very little fever; bowels open; tongue white. A vesicular eruption appeared this morning on the chest; pulse 100. Pergat. cum medicamentis u. a. —7th. No hooping; very weak; rather more fever, which is now preceded by a little shivering in the evening. ℞. Pulv. Cinchonæ, Sodæ Carbonatis, āā gr. iij. M. ter die sumendus. ℞. Spiritus Ætheris Nitrici, gtt. xij. ex aqua et sacharo 4ter in die sumendas,

inter.alia.—9th. Improves daily, scarcely any complaint; gets strength; eruption gone. Pergat. cum pulv. et guttis, u. a.—10th. Quite well: discharged.

ROYAL COLLEGE OF SURGEONS, LONDON.

LECTURES.

The ensuing Course of Lectures for the present year, commenced on the 18th instant, at four in the afternoon, and are to be continued on Tuesdays, Thursdays, and Saturdays, at the same hour, until completed. Tickets of admission to the Theatre will be delivered to Pupils attending the Chirurgical practice of any of the Hospitals in London, whose Tickets shall bear date in 1822, upon presenting, respectively, such Tickets at the College, between the Hours of Twelve and Three.

EDWARD BALFOUR,
Secretary.

The Council of the College having established a triennial Prize of £30, under the Title of "*Collegial Anatomical Prize,*" to be adjudged to the Author of the best Dissertation upon a Subject in Human or Comparative Anatomy and Physiology. The Board of Curators announce that the Subject for the first Prize is, "A minute Dissection of the Nerves of the Medulla Spinalis, from their Origin to their Terminations, and to their Conjunctions with the cerebral and visceral Nerves: authenticated by Preparations of the dissected Parts.—Candidates are not required to trace the Distribution of these Nerves in the extremities: and that such Prize be written for under the following Conditions, viz. Candidates to be Members of the College. Dissertations to be in English. Each Dissertation to be distinguished by a Motto or Device; nnd accompanied by a paper, sealed up, containing the name and address of the Author, having, on the outside, a Motto or Device corresponding with that on the Dissertation. Dissertations to be addressed to the Secretary, and delivered at the College before Christmas-day, 1824. The Prize-Dissertations will be preserved in the Library of the College. Dissertations which shall not be approved with their correspondent sealed Papers, will be returned upon authenticated application: and those which shall remain three years unclaimed, will become the property of the College; at which period their accompanying papers will be burnt unopened, in the presence of the Board of Curators.

By Order of the Board,
EDMUND BALFOUR, Sec.

Lincolns-Inn-Fields,
26th. Day of July, 1822.

MELANGE.

*Tar Vapour.** Dr. James Forbes, Deputy Inspector of Military Hospitals, has given the inhalation of tar vapour, as recommended by Sir A. Crichton, a trial in pulmonary affections, the result of which corresponds with our own experience in this remedy. It is, as Dr. Forbes observes, a difficult thing sometimes, to distinguish between chronic affections of the mucous membrane, and tubercular ulceration in the parenchymatous structure of the lungs. In the latter state tar vapour, like all other remedies, fails. But it does more—it aggravates the complaint, as we ourselves have witnessed. In chronic catarrhal complaints, however, it often is of service. We can scarcely agree with our author in his pathology of chronic catarrh. He considers it to be a disease succeeding inflammatory action of the bronchia, "but which is itself unattended with *any lesion or inflammation;* but, on the contrary, has for its cause a morbid relaxation of the lining membrane of these tubes." This "morbid relaxation" must surely be some kind of "lesion," even if it be not of an inflammatory nature. But we are far from believing that this morbid relaxation, and this "preternaturally increased secretion" of the mucous membrane of the lungs is unconnected with chronic inflammation. On the contrary, we think they are, if not one and the same, at least twin brothers, or probably as cause and effect with each other. Dr. Forbes illustrates his pathology by the state of the urethra in gleet; but really we think gleet exhibits an unequivocal example of chronic inflammation in the mucous membrane of the urethra, as a mucous diarrhœa does that of the lining

* Dr. Forbes, Med. and Phys. Journal, 284.

membrane of the intestines. Be this as it may, we shall give the result of our author's experience with tar vapour.

Diseases.	Total.	Cured.
Phth. Pulm.	19.	none.
Catar. Chron.	32.	8.
Improved.	**No Effect.**	**Bad Effect.**
none.	8.	11.
6.	18.	none.

*Apparent Pregnancy.**— On the 6th June, 1820, Dr. Dewees was requested to see a young lady who had been suddenly taken ill with severe pain in the uterine region, and almost instantly afterwards with delirium and mental disturbance. She complained much of her head, palpitation of the heart, and of occasional sense of suffocation. She had frequent lucid intervals from the delirium. She had not menstruated for more than a year—her belly was much swelled—her breasts enlarged—she had morning sickness—and "all the usual signs of pregnancy." Dr. D. on examining the abdomen, felt a circumscribed tumour within it, which, he was very certain, was an enlarged uterus, and he thought he distinctly perceived the motion of a fœtus. As there were febrile symptoms, bleeding and other antiphlogistic measures were ordered, which removed the symptoms before described, and she remained well for a fortnight. At the expiration of this period they again returned, precisely as before, and were again dissipated by the same remedies. The symptoms returned twice more, and twice more they were removed. Mean time, the abdomen continued to enlarge, and the feet and ankles to swell. On careful examination, it was found that there was a fluid in the abdomen, evinced by evident fluctuation. As the young lady's character was beyond reproach, and as there was no perceptible increase of the *uterine* tumour during the last two months, Dr. D. began to conclude that he had ascites instead of pregnancy to deal with. He therefore prescribed the volatile tincture o guaiacum, in doses of a teaspoonful thrice a day in a wine-glass full of milk. After taking this medicine for a few days, it purged her very briskly, and made her discharge very large quantities of urine. Some few drops of laudanum being added, she was enabled to persevere in its use for three weeks, without further inconvenience, at the end of which time no vestige of water was discoverable in the abdomen, "but a serous discharge was observed from the vagina, which was soon followed by a sudden gush of fluid blood, to the amount of about three pints, which soon abated in quantity, and at the end of a week, entirely ceased." She menstruated at regular periods after this, and continued to enjoy good health. We leave our obstetric readers to form their opinions respecting the above case. In a moral point of view it is interesting, as it shows how easily a derangement in the uterine economy may lead to the most cruel and unjust suspicions.

Sulphate of Kenini. This salt, which has been prepared with much care in Paris, has been successfully administered in ague. It was only employed in one case at the Edinburgh Royal Infirmary, but the patient having left the house prematurely, its efficacy could not be completely ascertained, the paroxysms nevertheless were evidently interrupted. It is spoken of with much confidence by French writers, and will probably prove an useful addition to our Materia Medica, as it allows of the exhibition of the active principle of cinchona in a very concentrated form, which is often if not always adviseable, as we seldom fail of exciting nausea by the powder of cinchona.

The following effects of Musk upon the Penis is absolutely incredible although related by Bouilli.—"Bouilli dit avoir connu un homme qui se frotta le membre viril de musc avant le coit; il l'exergât et resta uni à sa femme comme les chiens le sont avec leurs femelles—il fallut en consequence lui donner une grande quantite de lavements afin de ramollir les parties et d'obtenir la separation des deux individus."

OBITUARY.

On the 13th inst. at his house, Pleasant Place, Lambeth, Mr. Thomas Barkworth, aged 64, upwards of Thirty Years assistant at Apothecaries Hall, much regretted by all who knew him.

On the 14th instant, Wm. Keat, Esq. of Oakham, Rutlandshire, aged about 70.

BIRTHS.

On the morning of the 13th instant, the wife of Dr. Lang, of Newman Street, of her fifth son, and tenth child.

JUST PUBLISHED.

An EPITOME of the Elementary Principles of Natural and Experimental PHILOSOPHY. Part the First. Comprehending the general Properties of Matter, Mechanics, Pneumatics, Acoustics, Hydrostatics, Hydraulics; and a copious Account of the Invention, Progress, and present State of the Steam Engine; being the substance of a Course of Lectures on these Subjects, delivered at the Royal and London Institutions, and at Guy's Hospital, Southwark, by John Millington, Civil Engineer, County Surveyor to Bedfordshire, Professor of Mechanics in the Royal Institution of Great Britain, Secretary to the Astronomical Society of Lon-

* Dr. Dewees. Phil. Jour. Med. Phys. Sciences, No. VII.

don, Honorary Member of the Bath and West of England Society, M. G. S. &c. With an Index, and fourteen Lithographic Plates.

"The study of Natural Philosophy has of late years excited such general interest, as to render any commendatory marks in reference to this branch of Science altogether superfluous. Many valuable works on the subject have at different times appeared, some of these are of an elementary nature, and others more of a systematic form; the former being adapted to the use of the *Pupil*, the latter for the library of the *Preceptor*. The volume before us was originally composed for the use of the Students attending Lectures on Natural and Experimental Philosophy, at the Royal Institution and at Guy's Hospital. The subjects on which it treats are however much more copiously described than was first intended. It is evident, the Author has spared no pains in rendering his Work as useful as its limits would allow; and we are glad to find by the title-page, that the present volume is only a commencement of his labours, and is necessarily confined to some of the departments of the Science, we trust he will ere long favour the *Student in Philosophy*, or *Lover of Wisdom*, with the completion of his original design, and thus contribute towards the advancement of a Science, pleasing in itself, and most profitable as connected with other useful Studies; with a view to render the volume additionally interesting, the Author has introduced Fourteen Lithographic Engravings, illustrative of the following subjects, *Mechanics*, *Pneumatics*, *Acoustics*, *Hydrostatics*, *Hydraulics*, and a coloured representation of the *Steam Engine*, a copious account of which is given in the work, from its earliest invention to its present improved state. This brief sketch will, we trust, be sufficient to recommend to our readers a careful perusal of Professor Millington's Epitome, satisfied their trouble will be amply rewarded."

MODERN WORKS, ON THE SCIENCE OF MEDICINE,

Sold by all Medical Booksellers.

Essays on Surgery and Midwifery; with Practical Observations, and Select Cases. By James Barlow, Surgeon. With Plates. 8vo. 12*s*.

The New British Domestic Herbal, or a correct Description of British Medicinal Plants; intended for the Use of Families, and for every purpose of Domestic Medicine. Illustrated by Plates, exhibiting One Hundred and Thirty Two figures of English Plants. By J. A. Waller. Colored £1 10*s*. Plain 18*s*.

Engravings of the Human Bones, selected and reduced from the large Plates of Cheselden, accompanied by concise explanations, designed for the Use of Students. 12mo. 3*s*. 6*d*.

A Physiological System of Nosology, with a corrected and simplified Nomenclature. Dedicated by Permission to the Royal College of Physicians, London. By John Mason Good, M. D. F. R. S. 8vo. £1 1*s*.

The Dissector's Manual. By Joseph Henry Green, Surgeon to St. Thomas's Hospital. 8vo. 10*s*. 6*d*. With Plates, 16*s*. Bds.

The Anatomy of the Human Gravid Uterus, exhibited in Thirty-four superb engravings, executed by the most eminent Artists. With Descriptions to each. By the late William Hunter, M. D. Atlas Folio, £5 5*s*.

Medical Botany; or History of Plants in the Materia Medica of the London, Edinburgh, and Dublin Pharmacopœias, arranged according to the Linnæan System. In Two Volumes, Royal 8vo. With One Hundred and Thirty Eight colored Plates, and Portrait of Linnæus. £4. 4s. Bds.

A General System of Toxicology, or a Treatise on Poisons, drawn from the Mineral, Vegetable, and Animal Kingdoms, considered as to their Relations with Physiology, Pathology, and Medical Jurisprudence. Translated from the French. 2 vols. 8vo. £1 10*s*.

Supplement to the above Work, a Selection of all the New Matter from a recent Work on the same subject. By Professor Orfila. Entitled Medical Jurisprudence; to which are added, several beautifully coloured Plates. 12*s*.

Elements of Juridicial or Forensic Medicine, for the Use of Medical Men, Coroners, and Barristers. By E. G. Mare, M. D. Second Edition, much enlarged and improved. 9*s*.

A Treatise on Burns and Scalds, detailing the best Methods of Treating those Accidents, as practised in the London Hospitals, and by the most celebrated Medical Practitioners. By J. A. Waller. 1*s*. 6*d*.

NOTICE TO CORRESPONDENTS.

Our friend A. B., will recognize his favour this week. We beg him on all occasions to use his own discretion.

L. L., and J. D, are received.

We will thank P. Y., to Post Pay his Letter, should he feel disposed to address us again.

D. Y., D. and L., are returnable.

The Communication from ———, we can assure X. Z., has not come to hand, whatever may be the cause.

All Letters &c. (Post Paid,) addressed for the Editors, at the Publisher's, &c.

Printed by Plummer and Brewis, Love Lane, Eastcheap;

Published by Cox and Son, St. Thomas's Street, and 39, High Street, Southwark. Sold also by Sherwood, Neely, and Jones, Paternoster Row; Simpkin and Marshall, Stationers' Court; Callow and Wilson, Prince's Street, Soho: John Cox, Berner's Street, Oxford Street; W. Stewart, South Bridge Street, Edinburgh; and Hodges and M'Arthur, Dublin.

THE WEEKLY

MEDICO-CHIRURGICAL & PHILOSOPHICAL MAGAZINE.

No. VIII. SATURDAY, MARCH 29, 1823. *Price 4d.*

"FLORIFERIS, UT APES, IN SALTIBUS OMNIA LIBANT
OMNIA NOS, ITIDEM, DEPASCIMUR AUREA DICTA."

FROM THE

APPENDIX

TO THE

SECOND EDITION OF SIR ASTLEY COOPER'S WORK ON FRACTURES AND DISLOCATIONS OF THE JOINTS; WHICH

Contains many important and interesting Cases that have occurred in the Author's practice since the Publication of the First Edit.

On Dislocations of the Thigh.—Of these accidents three cases have happened. One was admitted into Guy's Hospital of dislocation into the foramen ovale. For the particulars here detailed, Sir Astley confesses himself indebted to Mr. Key, Assistant Surgeon to the Hospital. The second occurred under the care of Mr. Tyrell, at St. Thomas' Hospital; and for the history of the third, the author is indebted to Mr. Maurice, Surgeon at Marlborough.

"*Dislocation into the Foramen Ovale.* Stephen Holmes, aged forty-one, while working in a gravel-pit at Camberwell, was suddenly overwhelmed by a large mass of gravel falling upon him, and remained buried until dug out by his companions. When the gravel was removed, he was found in a sitting posture, with his legs widely separated, and unable to approximate them. In this position he was brought to Guy's, about seven o'clock in the evening, an hour after the accident had happened, and was placed under Mr. Curry, dresser to Mr. Foster. Being undressed and placed in bed in the recumbent posture, he was seen lying with his left thigh bent upon the pelvis his knee consequently elevated, and the whole limb fixed at a considerable distance from the other. On carrying the eye to the upper part of the thigh near the hip joint, a considerable change in form was manifest; the projection of the trochanter was entirely lost, and in its place a deep hollow was perceptible; and at the inner part of the thigh, near the pubis, a distinct projection appeared, having the form of the head of the bone covered by the adductor muscles. From these general appearances, we regarded the accident as a dislocation of the femur into the foramen ovale of the pelvis, and proceeded to make a more minute examination of the limb, to ascertain the precise nature of the injury.

"The man was desired to rise from his bed and sit on the edge of it, which he did, without inconvenience or pain; in this position, his left knee projected at least two inches and a half beyond the sound limb; this apparent elongation of leg arose principally from the oblique bearing of the pelvis, the real lengthening being afterwards ascertained to be not more than an inch and a quarter. In the erect posture, which he maintained with some difficulty, his body was bent forward in consequence of the pelvis projecting over the thigh; the knee was bent,

and the toe, which was slightly inverted, rested on the ground; the whole limb was advanced before the sound one, and remained in a state of abduction. He was then laid upon a firm table on his back, and the capability of motion in the limb carefully noted. His knee was first bent towards his breast without any difficulty, and to as full an extent as the opposite limb; the power of abduction was also complete, and the attempt not productive of pain; but extension and adduction of the thigh were the motions most impeded. When the limb was made to approximate the sound one, which could not be done without producing pain and numbness on the inner side of the thigh, the patellæ remained eleven inches distant from each other; and as soon as the hand was withdrawn from the ancle, the leg flew outward with a spring from the re-action of the two glutæi. The limb could not be carried backward, but remained permanently bent at the hip-joint, and when any attempt was made to fix it, he complained of great pain in the direction of the psoas and iliacus muscles. The depression observed at the site of the trochanter, was such as to render it difficult to feel that process; while on the inner side of the thigh a distinct projection was formed by the head of the bone, which could be felt under the adductors. These latter muscles were rendered very tense by the projecting bone. The nates appeared to preserve their usual form.

Reduction.—Having never had an opportunity of witnessing this kind of dislocation since my attendance at the Hospitals during the last eight years, I wished to see how far the method of reduction laid down by you was applicable in the present case. Your last publication being in the hands of one of the students, we referred to the plate, and proceeded to apply the pullies and bandage in the manner there delineated. The apparatus being once carefully and securely adjusted required no alteration, as it neither slipped from its s ituation, nor occasioned any inconvenience to the patient. Extension was then made by drawing the displaced limb across its fellow, while the pullies drew the head of the bone outwards; but in doing this, we run some risk of throwing the head of the femur into the ischiatic notch, for the thigh being large and fleshy at the back part, when drawn across the other, was necessarily carried somewhat forward, and thus tilted the head of the bone backward; had any alteration taken place in the situation of the head of the femur during this extension, it would have been carried under the acetabulum into the ischiatic notch; it was therefore thought adviseable to carry the leg behind the sound one, and as soon as this was done, the head returned with an audible crash into the acetabulum. The whole extension occupied fifteen minutes. This species of dislocation of the femur is by far the most easy of reduction of any that has come under my observation, and it may be presumed, that had the leg at first been carried behind, instead of before the other, the replacement of the limb might have been effected immediately. Where the limb is large, it is impossible to carry it in a right line across its fellow, and perhaps, in order to avoid the danger to which I have alluded, and which I have often heard you point out in your Lectures, it would be as well to adopt the line of extension which in this instance answered so well.

"Oct. 15, 1822.—This patient could stand by the side of the bed without support in a week after the accident.

The Cases &c. contained in the Appendix will be continued; as well as general references made to the whole of the New Edition of this great and valuable work. *

MEMOIR.

(Continued from page 101.)

Of these elementary systems, various textures are composed, some of which are distributed very generally, and others almost

* *The purchasers of the first Edit. of this work may receive the Appendix gratis, by order of the author, on applitation to their respective Booksellers;*—Cox & Son, *St. Thomas' Street, &c. &c.*

universally, through the body. They serve principally, either to connect together the elementary organs, to cover and protect them, to give form and stability to the body or to promote and facilitate its movements. In succession, therefore, they are treated of under the titles of the Anatomy of Cellular Substance and Adipose Substance; of Muscle, of Skin, and of Hair; of Cartilage, of Bone, and of Tendon; and the volume concludes with the Anatomy of Serous and Synovial Membranes.

Such are the subjects of this first volume, which contained only two of the eight parts which the whole work was designed to embrace. The remaining six parts would have treated successively of the anatomy of the Skeleton, and of the Muscles as attached to it; of the several Viscera of the body; of the Integuments which invest it; and of the Blood-vessels, Absorbents, and Nerves, as distributed to individual parts and organs. The methods of inspecting the body after natural or violent death, the process of Embalming, and the modes of preparing and preserving parts for anatomical uses, with directions for a course of Practical Anatomy would have been subjoined; and the work was destined to terminate with an Historical View of the science it had previously detailed.

For this comprehensive plan, the materials were in great part provided. Every writer within his reach, whether systematical or particular, it was the author's desire to consult; but it was also his wish to verify, as far as possible, the accuracy of their descriptions, and to make them his own by actual examination. This conscientious desire to do the utmost justice to the subject, necessarily delayed the progress of the work. At the period, however, of Dr. Gordon's death, the greater part of the difficulties had been overcome. The third part, comprehending the Anatomy of the Skeleton, was announced for publication, and exists among his MSS. in a state nearly ready for the press; and, had the author's life been spared, the remaining parts, which were in great forwardness, would have followed at no distant intervals.

In an elementary work of this kind, the chief merit must consist, not in original discovery, but in the general plan and arrangement of the materials, and the perspicuity and precision with which the subject is treated. To me it appears, that the arrangement adopted in the present instance is entitled to great praise. The reader is first made acquainted with the simpler parts, and proceeds gradually to more complex structures, which enables him to follow with greater facility, and to appreciate more justly, not only their general relations, but the particular combinations into which they enter, and the uses they serve in the construction of other organs. Nothing can exceed the general perspicuity and conciseness of the descriptive language employed by Dr. Gordon in this work. He uniformly addresses himself to the eye, avoids all discussion of questions of doubt and opinion, and enters into minute details with a clearness and precision which those only who write from actual observation can command. Some parts, as those of the brain and nervous system, are very elaborately treated. The author had not only consulted all the best writers, but submitted to the test of actual examination, the accuracy of every description connected with the anatomy of that organ. His descriptions of it will, therefore, be found much more minute than those of any preceding British writer. Some, perhaps, may regard them as too refined and elaborate, especially for an elementary work; and we think the convenience of the reader would have been consulted, had the subject been broken into smaller sections, instead of forming, as it now does, one continuous demonstration.

In his account of the Anatomy of the Common Textures, Dr. Gordon dissents, in several particulars, from his predecessors in regard to the structure of the skin. This organ, as is well known, consists of two parts —the cutis, or true skin, which is a highly organized substance; and the cuticle, or scarf-skin, which, on the closest inspection, exhibits no appearance either of fibres, of vessels, or of nerves. In the true skin, the hairs are formed, and penetrate to the surface through the cuticle; and on certain parts also, small apertures, connected with the sebaceous follicles of the true skin, are visible in the cuticle; but, with the late Mr. Cruickshank, Dr. Gordon denies that any distinct pores are visible, either by the naked eye or the microscope, in the cuticular membrane—an opinion also maintained by Professor Rudolphi of Berlin.

Between the skin and cuticle, when separated from each other, delicate colourless filaments may be seen. These were regarded by the late Dr. Hunter as vessels through which the sweat was exhaled: and by Mr. Cruickshank as fine processes of cuticle which lined the pores of the true skin; but, according to Dr. Gordon, they are neither vessels, nor processes of the cuticle, but mere threads of mucous matter, which always form between the cuticle and true skin after death, in consequence of decomposition.

It is now more than a century ago since the illustrious Malphigi described a layer of substance, as intervening between the cuticle and true skin, to which was given the name of corpus mucosum vel reticulare. In the Negro, this substance was affirmed to be black, and of various lighter hues in the other varieties of the human race; and to its particular colour the varied complexions of the skin were generally ascribed. In the

Negro, the Caffre, and the Malay, Dr. Gordon satisfied himself, by many dissections, that a black membrane exists, to which the colour of black men is, no doubt, owing; but he was not able to find any light coloured rete mucosum, corresponding to this black one, in the inhabitants of Great Britain, nor in those of other nations resembling them in colour. Doubts respecting the existence of a specific colouring matter in the white races of mankind, analogous to the black substance of the Negro, occurred also to Mr. Lawrence; and Professor Rudolphi, asserts, with Dr. Gordon, that no such part as a Rete mucosum exists in white people.

I have selected these few examples to show that Dr. Gordon, in his anatomical pursuits, constantly examined for himself every subject that came under his notice; and that, with a due feeling of respect and observance towards others, he combined always that sagacity of observation, and soundness of judgment, which enabled him to improve on the labours of those who had gone before him. This work, the most important in which he had been engaged, Dr. Gordon inscribed to his first and best friend Professor Thomson, by whose counsel and guidance he had been directed in all his scientific undertakings, and towards whom he always felt and expressed the sincerest respect and gratitude.

(To be continued.)

PHYSIOLOGICAL OBSERVATIONS.

Magendie on Vomiting.

(Concluded from Page 102.)

Would the contraction of the diaphragm and muscles of the abdomen take place independent of the action of the emetic on the stomach; and that substance, instead of producing any specific action on this viscus, would it act directly on the muscles just mentioned? Such is the strange idea that gave rise to the preceding observations. Happily, I imagined a means of clearing up this doubt; I made an opening in the abdomen of a poodle dog, about two years old, and having brought out the stomach by this aperture, I carefully tied the vessels returning to this viscus, and afterwards totally extirpated it. I afterward brought the lips of the wound together by means of a suture; then, having laid bare the crural vein, I injected into its cavity a solution of two grains of emetic tartar in an ounce and a half of water. Scarcely had I finished the injection, than the dog began to be sick, and soon made all the efforts which this animal is wont to do when vomiting. Even these efforts appeared to me much more lengthened and protracted than in ordinary vomiting. The dog appeared quiet for about a quarter of an hour. I then renewed the injection, by still throwing the same emetic solution into the crural vein, which was always followed by the same vomiting efforts. I repeated the injection six times, and as often were the same effects re-produced.

This experiment, as may be seen, is decisive: it is calculated to throw considerable light upon the action of emetics. But, to return to my subject, I shall pass on to another experiment, which the preceding suggested to me.

I extirpated the stomach of a dog of the ordinary size, in the manner of the experiment just mentioned; I introduced a pig's bladder into the abdomen, round the neck of which, I had fixed, by means of thread, an elastic gum cannula; I introduced the end of this cannula into the œsophageal extremity, and also fixed it there with thread, so that the vessel tolerably well resembled the stomach, and, like it, communicated with the œsophagus. I passed about a pint of water into the bladder, which distended it, without entirely filling it. A suture was applied to the wound in the abdomen, and four grains of emetic tartar were thrown into the jugular vein. Nausea soon came on, followed by real vomiting, and the animal immediately threw up water abundantly from the vessel. Here our labours might have terminated; for assuredly, after these experiments, no one could doubt the direct influence of the diaphragm and abdominal muscles as the media by which this vomiting was produced; but from our conviction of the necessity of multiplying physiological experiments, particularly those that have any influence in medicine, we

prosecuted our enquiries, and the results we obtained, although less important than those we have already communicated, appeared nevertheless interesting, inasmuch as they are of a nature to confirm them. It is evident from the preceding experiments, that the abdominal muscles and diaphragm concur in producing vomiting; but, in the production of this phenomenon, what part does the diaphragm perform? and how far are the abdominal muscles concerned in it? This is what it was most interesting to determine by experiments. If the diaphragm only received the diaphragmatic nerves, it would have been easy to prevent the contraction of the muscle, by dividing them; but it also receives filament from the dorsal pair, which are of themselves sufficient to keep up its contractions. Experiment has proved to us, that when the diaphragmatic nerves are cut, the contraction of the diaphragm in point of energy is very sensibly diminished; and it may be added, without being very far wrong, that the diaphragm loses by this section, the three-fourths of its contractile power. What influence could the section of the diaphragmatic nerves have on vomiting? We made this section in the neck of a dog three years old, and we injected three grains of emetic powder into its jugular vein: a very feeble vomiting only took place; another emetic injection, a quarter of an hour afterwards, did not excite any vomiting. We opened the abdomen, and we endeavoured to produce vomiting by compressing the stomach: the pressure, although very strong and long continued, provoked no vomiting efforts, it did not even appear to excite nausea. We conceived that this circumstance might belong to some individual habit of the animal, but having several times since repeated the experiment, we obtained no other results.

There is only one means of preventing the contraction of the abdominal muscles in vomiting; viz.—by separating them from their attachments to the sides of the linea alba; which we also did in several animals. We detached successively the great oblique, the rectus and transversalis, leaving only the peritoneum throughout the extent of the anterior surface of the abdomen. In this experiment every thing going on in this cavity is distinctly seen through the peritoneum; for example, the peristaltic motion of the stomach and intestines, and, if the stomach actually contracted, it would be easy to be convinced of this also. The abdominal muscles being thus detached, we injected three grains of emetic powder into the jugular vein, and nausea and vomiting were almost immediately manifested by the sole contraction of the diaphragm. It was curious, during the convulsive contraction of this muscle, to see the whole intestinal mass propelled downwards and pressing strongly against the peritoneum, which gave way at certain points. In this case, the linea alba, formed longitudinally by a very strong fibrous tissue, is the only part that resists the pressure of the viscera; its existence then is indispensible for the production of vomiting. It perhaps fills a similar use in its ordinary state. This experiment is important inasmuch as it proves that the efforts of the diaphragm alone are capable of producing vomiting, a circumstance which is again confirmed by the following experiment:—

We detached, as above, the abdominal muscles, and laid bare the peritoneum, and afterwards divided the diaphragmatic nerves, and injected the emetic solution into the veins: the animal had some nausea, but nothing further. Although we repeated the emetic injection several times, we were never able to produce any sensible vomiting effort.

It is doubtless of the utmost importance in Physiology, to discover new facts. This science stands in great want of them. It is also equally important to deduce only just consequences from these facts; but this appears to be the most difficult point. It

is here at least where the most eminent physiologists have foundered. Shall we avoid the same rock by drawing only the following inferences from the facts related in this Memoir?

1st.—The stomach does not always appear to contract in vomiting: this phenomenon may take place without the stomach presenting any vestiges of contraction. 2dly.—The pressure directly exercised upon the stomach, by the diaphragm and abdominal muscles appears sufficient to produce vomiting. 3dly.—In certain cases during nausea, the air of the atmosphere is carried into the stomach. 4thly.—The antimoniated tartrite of potash, injected into the veins, instead of acting upon the stomach, as is generally believed, determines the convulsive contraction of the diaphragm and abdominal muscles.

In another Memoir I will point out the observations made on repeating Wepfer's experiments, and answer the objections by direct experiments.

(End of the Memoir.)

Observations on Phrenology, as affording a systematic View of Human Nature. From Med. and Chirur. Rev. p. 896.

Phrenology, from φρην mind, and λογος, is the term used by Dr. Spurzheim to denote a peculiar system of doctrines concerning the mind, founded on certain views of the physiology of the brain. The propriety of the term will become apparent, when we recollect, that the brain is the organ upon which the manifestations of the different mental powers depend; and that for every mental act, there must be a corresponding cerebral affection; and, therefore, that a correct exposition of the functions of this organ will necessarily imply a true theory of mind. These doctrines have been taught for more than twenty years, at Vienna and Paris; but it was not till 1816, when Dr. Spurzheim visited England, that general attention was attracted to them in this country. He delivered lectures upon the philosophy of his system, and gave demonstrations of the anatomy of the brain, by which, public curiosity was excited in an extraordinary degree, and much angry disputation occasioned. Established opinions received a shock, and all the partialities which accompany them were called into play to decry the merits of the new doctrines, on the one hand; while their novelty, and a certain degree of enthusiasm which inspired their advocates, shed a dazzling lustre around them on the other. Cool deliberation, always essential in forming a correct judgment of a new discovery, was thus excluded; and, after many pamphlets had been published and answered on the one side and the other, the subject appeared to fall into neglect, with its merits as undecided as when first introduced to the notice of the public. After a silence of two or three years, however, the advocates of phrenology appeared again upon the field, and shewed, if possible, a stronger conviction of the truth of their opinions, and a more complete acquaintance with the doctrines themselves, as well as with the merits of the objections which had been stated against them. Mr. Combe's Essays on Phrenology led the way;—they appeared in November, 1819, and their author testified strongly in favour of the truth of the new doctrines, and strenuously insisted on the necessity of enquiry into a subject which, in his opinion, so nearly affects the best interests of the human race. To this work, soon after succeeded the "Illustrations of Phrenology, by Sir G. S. M'Kenzie," in which the author gave portraits of remarkable characters, and compares their mental manifestations with the developement of their brains. He contends, also, for the accuracy of the principles of phrenology. Several able criticisms next appeared in the pages of the New Edinburgh Review, in which the editor pledges himself that the doctrines are founded in nature. In 1820, Dr. Elliotson, in notes to the third edition of his Translation of Blumen-

bach's Physiology, gave a decided testimony to the truth and importance of the science.

In February 1820, a society was established in Edinburgh for cultivating and diffusing a knowledge of phrenology. A collection of sculls, casts, and busts, intended to exemplify the several organs and their combinations, was formed, and is every day receiving additions. This collection is open weekly to the inspection of the public. Meetings are held during the session, for discussing all subjects connected with phrenology, such as its application to elucidate the philosophy of mind, to education, legislation, medicine, and medical jurisprudence. The list of members includes gentlemen of talent and respectability of the three learned professions, besides artists and literary characters, and the numbers are on the increase. In 1821, Mr. Abernethy published "Reflections on Phrenology, addressed to the Court of Assistants of the College of Surgeons, London," in which he treated it as the true system of the philosophy of mind, and recommended it to the special consideration and candid examination of medical men. About the same time, appeared Dr. Spurzheim's book on the Application of Phrenology to the Improvement of Education. In spring 1822, a society similar to that of Edinburgh, was instituted at Philadelphia, of which Dr. Physick is president, a gentleman who is well known to our readers. Among its members are to be found some of the most eminent men in law, medicine, and divinity, in that city. They have procured copies of all the casts in this country, and of the books in use among the phrenologists. Mr. Combe's Essays were reprinted under the direction of the society, and enriched with the anatomy which he had omitted. And, lastly, have appeared the "Observations on Phrenology," by the anonymous author, now before us, who considers it "as affording a systematic view of human nature."

When we find a rooted conviction of the truth of the new view, and a deep sense of their importance arising at this distance of time, in the minds of cool and able men, this circumstance itself affords a presumption, that there is something substantial at the bottom whatever may have been added by fancy. The glare of fashion and novelty, which at first placed the structure in too dazzling a light to be clearly contemplated, has at last passed away, and it is perhaps only now that the subject comes properly under the candid and dispassionate consideration of the man of science, because now it comes before him stript of all foreign support, and resting entirely on the basis of its merits. The partialites and prejudices with which even the most vigorous minds are at times assailed, have had time, in a great measure, to disappear. The present moment, is therefore, particularly favourable for an examination of this long agitated question. Impelled by these considerations, and aware of the extreme importance to medicine and to philosophy, of the discovery of the functions of the brain, we have ventured to notice the publication at the head of this article, more with the view of seriously recommending a liberal and candid discussion of the merits of both sides of the question, as the most philosophical and sure way of ultimately arriving at the truth, than of attempting to deliver any decisive opinion of our own upon the subject.

We are led to desire this calm consideration the more, because hitherto, we conceive the weight of fact and argument and philosophy, to preponderate rather on the side of the phrenologists, than on that of their adversaries; not because we mean to assert that the opposite views are incapable of support, but that the opposition has been conducted in a way altogether unphilosophical; ridicule and vague assertion having been too unsparingly employed on the one side, while vigorous reasoning, and an appeal to

Nature, have been constantly held out upon the other. The consequence has been, that although thousands boldly assert the whole of the doctrines to be imaginary, no person is to be met with, who is able to shew a clear and philosophical reason, why these ought to be disregarded; and it is a curious fact, well worthy of observation, that except the late Dr. Gordon of Edinburgh, who fell, as it were, into a serious discussion inadvertently, and unintentionally, by his intemperate article in the Edinburgh Review, no author of note, either medical or metaphysical, has chosen fairly to grapple with the subject, and expose its errors; and of those, who have written, we do not know one, who has made good his objections in the judgment of impartial men, and replied satisfactorily to the answers given by the disciples of the new school. Dr. Roget, indeed, is another author of consideration, who has delivered an adverse opinion on their merits; but he appears rather as a historian of the doctrines, who sums up his account by delivering an opinion against them, than as a regular enemy who comes into the field to oppose and destroy them. On this account, we do not hold this gentleman as pledged even on the side which he has espoused, so as to stake his reputation on their futility, but view him as a critic open to conviction if he has pronounced an erroneous judgment. Many persons, no doubt, regard the doctrines as too ridiculous to merit a serious refutation, but we cannot subscribe to this opinion. The writings of Drs. Gall and Spurzheim themselves are worthy of a calm and philosophical refutation, if they contain erroneous views; but when other men of judgment, and not destitute of talent, come forward as supporters of their opinions; and not only so, but when societies are formed for their cultivation, we suspect that the tide of ridicule will soon begin to flow in an opposite direction, if those who patronize the established system, persevere in this supercilious treatment of their opponents. The contempt of the Chinese for the science and literature of Europe, does not arise from a more enlarged and comprehensive understanding in that nation; but it marks the extent to which ignorance and prejudice possess the mastery over their minds.

(To be continued.)

On a new Method of removing Ascarides from the Human Body. By WILLIAM HOWISON, M.D., Lecturer on Materia Medica, Pharmacy, &c. &c. &c.

The principal cause which gives rise to ascarides, is stated by medical writers to be, unwholesome food with bad digestion. The former, however, can scarcely be said to be the cause, as ascarides are not more prevalent amongst the lower orders of society, than amongst the higher; which undoubtedly would be found to be the case, if the above remark was well founded. On the contrary, we daily meet with abundance of examples of ascarides in the higher walks of life, and amongst individuals who can command, and actually do subsist upon, the most notorious diet.

Ascarides appear most frequently in individuals of a relaxed habit, and whose bowels contain a preternatural quantity of mucus, or slimy matter. Hence it is stated by medical writers to be a disease most common to children; but that they sometimes prevail in adults to a high degree, particularly in those who live chiefly on a vegetable diet. I know many individuals above adult age, who have been infested with ascarides for the greater part of their life; but I cannot say that it is peculiar to those living on vegetable food, having met with repeated instances of it in those subsisting upon animal diet, to which they were restricted by dyspepsia; and this disposition to ascarides evidently runs in families. I have known all the individuals of a family infected with them; and therefore am of opinion that they may be said to be hereditary,

in the same manner as phthisis pulmonalis, mania, and scrophula.

It is not my intention, in these pages, to consider the different means recommended for removing ascarides from the animal economy. We are all aware that, however actively employed, they are tedious, slow, and even uncertain in their effects; that some of them are violent; and that, when long continued, they tend to injure the organs of digestion. Of all of them, however, I may be allowed to say, that I have, in the course of my limited experience, seen most benefit from the administration of the powder of tin combined with the seeds of santonicum, followed up, at regular intervals of a few days, by doses of jalap proportioned to the age of the individual. And to this method I should always give the preference, during the period of infancy and childhood. The removal of ascarides, by means of irritating injections, and it is only such that can prove effectual, or by external application, as tobacco, turpentine, &c. to the stomach and intestinal canal, appears to me to be inconvenient and indelicate; and the feelings of the people of this part of the world are such, that they will never submit to the use of injections, except in cases of extreme urgency. The practice of the present day confirms this remark. Dr. Heberden says, a repetition of gentle purges alleviates whatever uneasiness ascarides may occasion; but no internal medicines, nor clysters, can certainly be depended upon for extirpating them. Tobacco clysters and others, made of solutions of sublimate mercury, have had little or no effect.

In suggesting the present method of removing ascarides from the human body, it is requisite to bear in mind the following circumstances. 1st. That these animals infest every period of life, from infancy to a later period than adult age; 2ndly. That they are confined to the lower extremity of the intestinal canal, occupying principally, or entirely, that part of the gut extending from the point of the finger, when introduced completely within it, down to the sphincter ani; 3dly. That when removed every twenty-four hours, their future generatian will be prevented by the obstruction of their means of propagation; 4thly, and lastly, That this method of removing ascarides is inapplicable to the age of infancy.

The method of removing ascarides already alluded to, must be performed by the patient or individual infested by these insects, in the following manner. Previous to getting into bed, and when completely undressed for that purpose, he is to bring his body into the semibent position, by leaning considerably forwards, supporting himself by means of his left hand resting upon his thigh, or a low table. Having previously besmeared the anus with melted candle-grease, which on such occasions is always at hand, or, what is preferable, with hogs-lard, he is to cover completely the middle finger of his right hand with the same unctuous substance, particular care being taken to have the nail of that finger cut short, so as not to scratch or irritate the internal surface of the rectum. With his body in the position above described, he is next to introduce this finger gradually and cautiously up the rectum, until the hand coming in contact with the sphincter ani, prevents its further introduction.

When the sphincter ani muscle is in a state of relaxation, which it generally is, this step of operation will be effected with great ease, and without giving the slightest pain. When in a state of spasmodic contraction, which however seldom happens, it then becomes more difficult; and if this contraction should be present to a considerable extent, it will be proper to defer the introduction of the finger until it has completely gone off. The point of the finger within the rectum is then to be rubbed along the whole inner surface of the gut, bringing it gradually downwards, until it

comes out at the anus, when the whole mass of ascarides occupying the rectum will be brought out upon the finger near to its point, rubbed into the form of a ball enveloped in mucus and unctuous matter. The first bringing out of the finger, if properly performed, will be found to have removed the ascarides completely, as, upon repeating the operation a second or a third time, nothing will be brought down but mucus, thrown out in great quantity by the increased action of the glands of the gut, irritated by the second or third introduction of the finger.

This operation is to be repeated every night, when, in a short time, the gut will be completely cleared of ascarides. Their further means of propagation being removed, the symptoms produced by them will cease, and the individual be restored to perfect health. I may also remark, that when the ascarides have been several times removed in the above-mentioned way, they are observed to diminish in size; a proof that the older or full-formed ones have disappeared; and that they are succeeded by their offspring, which have not been allowed to come to maturity.

When the rectum is loaded with fecal matter, some obstruction is offered to the introduction of the finger; and the intention of the operation, the removal of the ascarides, is considerably frustrated.

Fromwhat has now been stated it is obvious, that ascarides can be removed from the intestinal canal by a manual, or, what may be termed, a surgical operation, altogether independent of the skill of the physician; and that it presents many advantages over the methods formerly in use. The suffering individual gets rid of the noxious animals, in which his disease consisted, without swallowing unpleasant medicines, which impair the organs of digestion, without wetting his belly by fomentations or liniments, and without distending the intestinal canal by irritating injections.

No. 9, Nicholson's-square, Dec. 1822.

Case of Fracture of the Os Frontis, with a Loss of a considerable Portion of Brain. By John Edmondson, Jun. Member of the Royal College of Surgeons, London.

August 2d, 1822.—C. H. fifteen years of age, at nine o'clock, p. m. when in the act of discharging a brass cannon, too heavily loaded, and crammed with old cloth, &c. the piece burst, and one of the fragments struck him on the forehead, and shattered the frontal bone, bruising and lacerating the integuments to the extent of $3\frac{1}{2}$ inches long and $2\frac{1}{2}$ broad. The fracture was more than an inch longer than the external wound. It commenced on the right side, about an inch from the mesial plane, which it crossed, and passed downwards to the left internal orbitar process, run across the orbit to the external orbitar process, and to where the frontal unites to the sphenoidal bone, then passed upwards through the temporal process, and above the superciliary ridge, and again crossed the mesial plane to meet its commencement on the right side. The anterior lobes of the brain were distinctly visible, and pulsated freely. The fossa for the longitudinal sinus was very apparent. The largest piece of bone that was removed has the frontal spine upon it. This piece measured $2\frac{1}{2}$ inches long by $1\frac{1}{4}$ broad. Another piece extended from it to the root of the nose, and was nearly an inch square. A third piece from the left temple $\frac{1}{4}$th of an inch long. A fourth piece consisted of a portion of the superciliary ridge. Many smaller portions of bone of various sizes and forms, in all thirty-two, were also removed by means of the forceps. Several of them penetrated the dura mater, but were easily extracted. More than a table-spoonful of cerebral substance came away at the time. A considerable quantity of blood was lost soon after the accident, but very little during the operation. Messrs. Edmondsons operated by carefully removing the fragments of bone. The

wound was cleaned, and simple dressings applied to it. The patient was afterwards attended by them, in conjunction with Dr. Barnes.

After being put to bed, pulse 88, rather full, feet cold, makes no complaint, and appears disposed to sleep. Half an hour afterwards was sick, and vomited, and was bled at the arm to the extent of ℥ x. At four in the morning, Aug. 3d, pulse 108, moans, and seems uneasy; skin rather hot, and face flushed. V.S. was repeated to ℥ xii.; after which the pulse fell to 96, and he took a cathartic draught of senna, and afterwards a little tea. Twelve noon, pulse 96, skin warm; the wound was dressed, and near two spoonfuls of cerebrum were discharged; gave correct answers to questions put to him, but had no recollection of the accident; voided a large quantity of urine, of which he was perfectly sensible, but afterwards fainted, and the pulse fell to 76. As the senna had not operated, he took five grains of calomel, and was ordered a draught of infusion of senna and sulphate of magnesia, if the calomel should not operate in two hours. Nine, p.m.—Pulse 84, thready, face flushed, and hot; has had one dejection. ℥ x. of blood taken from the arm.

4th, eight a. m.—Passed a restless night; complained occasionally of pain and throbbing in his head, and of general uneasiness; pulse varied from 80 to 100; was quickened by his turning over in bed, or making any exertion, and fell when he became composed: no thirst, skin warm, face rather flushed; belly not moved since yesterday; wound of a darker colour, about a teaspoonful of cerebrum discharged; blood taken yesterday not buffy; ordered gr. v. submur. hydrarg. Nine, p. m. —Has slept much during the day; had one scanty dejection, and has since taken ʒ ii. magnes. sulphat., but expresses great disgust at medicines, and becomes passionate when urged to take them; skin warm, tongue whitish, pulse 96; has taken a cup of tea, and the same quantity of arrow root; is perfectly rational; a small quantity of brain on the dressing, wound looking better.

5th.—Had an easy night, slept soundly, pulse 80, more thirst, belly unmoved, wound maturating, a very little cerebral subtance discharged; ordered gr. v. pulver. scammon. and four hours afterwards gr. v. submur. hydrarg. if the scammony should not operate.

6th.—Had a good night, pulse 80, face more swelled, one dejection, a thin sanies mixed with pus on the wound.

7th.—Passed a restless night, pulse 72, tongue whitish, skin hot, face flushed; no brain on the dressing, a little slough on the middle of the wound; the scammony to be repeated, had some delirium through the day; complained of excessive hunger, and, as a very little food was given to him, he was with difficulty restrained and composed. The patient afterwards improved daily; the same treatment was continued; he was kept on the lowest diet, the room darkened, and every noise prevented as much as possible. His bowels required a laxative every third or fourth day for the first three weeks. He afterwards became regular in this respect, and was allowed a more liberal diet. Owing to the tumid state of the eyelids, which were exquisitely painful, the edges of the wound could not be brought together. For some days there was a triangular opening about the right frontal sinus, from which issued a colourless fluid. A fungous tumour also arose from the wound, which, however, diminished as the discharge increased, until the 20th of August, when it rose to a considerable height, and was attended with pain in the head and neck, confusion of thought, hot skin, restlessness, and firm pulse. He was freely bled from the arm, and almost immediately the discharge returned to such an extent as to wet through his pillows and bed-clothes, and all the troublesome symptoms were relieved.

After this time he took a pill containing gr. ¼ of digitalis three times a day. The discharge abated; the wound healed gradually by granulation, and was completely closed on the 27th of October, though, for some weeks previously, it was not larger than a silver threepenny piece. At present, November 7th, he is in perfect health: the cicatrix much less than was expected, both in length and breadth; but any observer may easily perceive the extent of the fracture from the depression. The eyebrow so far overhangs the eye as to cover the eyelid and eyelashes as well as half of the inner canthus of the eye. Where the superciliary ridge should be, the eyebrow is drawn in, excepting the outer part of it, which appears to rise higher than natural, partly from the contraction of the wound, and also from the drooping of the opposite end near the nose. In short, the eyebrow appears to frown making a conspicuous depression near the nose at the orbitar process, which can easily be explained by the loss of the ridge and part of the frontal bone, over which the occipito-frontalis moves.

His mental faculties have suffered no injury; he is a good classic scholar for his age, and fond of reading; but is not yet allowed to indulge in his favourite studies so much as he could wish. *Nov.* 7, 1822, *Keswick.*

Account of the Dosia Powder, as given by M. Titsingh, formerly Agent of the Dutch East India Company at Nangasahki.

The Japanese, instead of enclosing the corpse of the dead in coffins of proper portions with the deceased, place the body in a tub three feet high, two feet and a half in diameter at the top, and two feet at the bottom. "It is difficult (says M. Titsingh,) to conceive how the body of a grown person can be compressed into such a space, when the limbs, rendered rigid by death, cannot be bent in any way.

"The Japanese to whom I made this observation, told me, that they produced this result by means of a particular powder, called Dosia, which they introduced into the ears, nostrils, and mouth of the deceased, after which the limbs acquired astonishing flexibility. As they promised to perform this experiment in my presence, I could do no other than suspend my judgement, lest I should condemn as an absurd fiction, a fact, which indeed surpasses our conceptions, but may yet be susceptible of a plausible explanation, especially by Galvanism, the recently discovered effects of which also seem at first to exceed the bounds of credibility.

"The experiment accordingly took place in the month of October, 1783, when the cold was already pretty severe. A young Dutchman having died in the Island of Desima, (the site of the Dutch Factory.) I directed the physician to cause the body to be washed and left all night exposed to the air on a table placed before an open window, that it might become completely stiff. Next morning, several Japanese, some of the officers of the factory, and myself, went to examine the corpse, which was as hard as a piece of wood. One of the interpreters drew from his bosom a Santock, or Prayer Book, and took out of it an oblong paper, full of a coarse powder resembling sand. This was the famous *Dosia Powder.* He put a pinch into the ears, another into the nostrils, and a third into the mouth, and presently, whether from the effect of this drug, or of some trick which I could not detect, the arms, which had before been crossed over the breast, dropped of themselves, and in less than twenty minutes by the watch, the body recovered all its flexibility.

"I attributed this phenomenon to the action of some subtile poison, but was assured that the Dosia Powder, so far from being poisonous, was an excellent medicine in difficult labours. In such cases, a cup of hot water, in which a little of the Dosia Powder, tied up in a bit of white rag, has been

infused, is administered to the patient, who is then sure to obtain a safe and speedy delivery.

"The Dosia Powder is likewise recommended as the most efficacious remedy for diseases of the eye. An infusion of this powder taken even in perfect health, is said to have virtues which cause it to be in great request among the Japanese of all classes. It cheers the body, and refreshes the spirits. It is carefully tied up in a piece of white cloth and dried after being used, as it will serve a great number of times. The same infusion is given to persons of quality, when at the point of death; if it does not prolong life it prevents rigidity of limbs, and the body is not exposed to the rude handling of professional persons; a circumstance of some consequence in a country where respect for the dead is carried to excess."

M. Titsingh at his departure in 1784, procured a considerable quantity of this powder, some of this was put up in bundles of twenty small packets, some was in small bags;—this was a coarse powder, in which were to be seen small particles of gold, and which probably was not yet possessed of the requisite virtues. "One small packet only had undergone the chemical operation which insures its efficacy, and this powder was as white as snow."

Passing over the account given by M. Titsingh, of the miraculous discovery of this powder, and the mummery practised by the priests, who possess the secret of its composition, we proceed to detail the observations of M. Charpentier Cossigny, who met M. Titsingh in Bengal, respecting this powder.

"The only Japanese medicine not belonging to the class of vegetables, and which nevertheless, I cannot affirm to be either mineral or animal; the only one I say of this kind mentioned to me by M. Titsingh, is a grey powder, with a few packets of which he had even the goodness to favour me. It is called Dosia. The finest portion is an impalpable powder, which may perhaps be ashes; it is of a greyish color: the rest consists of small stony irregular fragments, the largest of which are of the size of a pin's head. Some are as transparent as crystal, others only semi-transparent, having a milky appearance, and others again are variously colored. Nearly one-tenth of the whole of this powder is composed of small laminated fragments, blue, or a dull green on one side, encrusted on the other, and mostly sparkling like mica. On examining them with a good magnifier, they appeared to me to be fragments of pyrites, charged in their fractures with a saffron-colored efflorescence, which I take to be of an ochrey nature.

This powder has no perceptible effervescence with the most highly concentrated acids; but the bits, which I consider as of the nature of pyrites, are cleared by vitriolic acid, of the tartar which hides their metallic lustre, and assume, in a short time, all the appearance of gold-dust. The finest part of the powder seems to be dissolved by oil of vitriol. As to the other fragments, they remain in the menstrum without any apparent alteration. I suspect them to be a compound, partly sparry, partly quartzose, reduced to powder by art. I exposed it for a considerable time to the focus of a good common burning-glass, which communicated to it a fire heat, and it was merely turned a little black; on examining it afterwards, I found no trace of fusion, and the smallest particle" He adds that the Japanese ascribe effects to this powder, which, if verified, would be truly wonderful; but of which he appears incredulous, for having applied the Dosia on cold bodies in double and triple doses, they remained perfectly frigid, and M. Charpentier Cossigny took a dose of it without its producing the slightest effect. It is without smell, and with as little taste as the most insipid sand. —*Trans. Illustrations of Japan by M. Titsingh, pp* 296, 297, *and Note.*

On the presence of Oil in Human Blood.—Extract of a Letter from Thomas Stewart Traill, M.D., Liverpool, to Dr. Duncan, Junior.

A patient of my friend Dr. M'Cartney has afforded me another opportunity of detecting oil in the serum of human blood. The patient is a stout young man, who was labouring under acute hepatitis. The blood separated spontaneously; but the white colour of the serum induced Dr. M'Cartney to send the fluid to me for examination. Its colour and consistence strikingly resemble that described in your XVIIth Volume. Its sp. gr. = 1.0187. which nearly agrees with that of the second instance, and is somewhat less than in the first.

100 grains of this serum evaporated slowly to dryness, afforded 21.1 gr. of residue. Of this, 4.5 gr. consisted of oil, exactly resembling that obtained in my previous experiments. The albumen, after being well soaked in distilled water, and repeatedly washed and dried = 15.7 grs. The evaporation of the washings afforded 0.9 gr. of saline matter, of which 0.7 were muriates, and 0.2 probably lactates. Hence we may state the contents of this remarkable serum to be—

Water	=78.9
Albumen . . .	=15.7
Oil	= 4.5
Salts	= 0.9
	100.0

The peculiarities of this serum consist in its containing oil, which exists in the form of emulsion, and in the large proportion of $4\frac{1}{2}$ per cent.; in its having about double the quantity of albumen that is assigned, by the best chemists, to the serum of blood; and in its diminished proportion of saline ingredients.

It is worthy of remark, that these peculiarities appear to be connected with inflammatory disease; and, in two of the cases, were decidedly accompanied by acute hepatitis. Since my last letter to you, I have had an opportunity of examining the serum of the blood of one of the individuals above alluded to, when he was in health; but it presented nothing peculiar.

I may also add, that the serum, resembling *thin water-gruel* in colour and consistence (which, if I recollect aright, was first described to me by you), has fallen under my observation. I was unable to detect any oil in it; and its peculiarities seemed to be owing to an excess of albumen.

Whether these facts will assist in throwing light on the functions of the liver, it may be premature to determine.

Liverpool, January 10, 1823.

HOOPING COUGH.

(Concluded from Page 110.)

Case 10.—Elizabeth Stratton, æt. one year and six months; 4th January, 1823. Ill six weeks: hoops at least once every hour in the day, as well as in the night; face frequently becomes blue and swelled after a fit, and the eyes appear very heavy: has scarcely any difficulty of breathing, except towards night; bowels open; restless and feverish at night; has never bled any at the nose or mouth. Appl. Hirudines duæ fronti. Nihil præscribendum est.—14th. Leeches bled profusely; has never hooped since their application: all other complaints soon left the patient, and she is now quite well. As the child improved so rapidly, the mother did not think it necessary to return to the Infirmary till to-day. Discharged.

Case 11.—Communicated by Dr. Gregory: it is considered of importance, seeing that the benefit which followed the treatment was as decided in his hands as in mine.

Anne Maycer, æt. six years; 2d December, 1822. Ill four weeks, but has hooped only during the last three. Has coughed very violently, both night and day, the last eight days, and brings up phlegm, but not her victuals. Pain on coughing referred to the larynx. Has rapidly emaciated; cannot be sent

to school, and seldom sleeps. Her brother and sister have both hooping-cough at present. ℞ Lotion: Antim Tartar. cum Tinct. lyttæ pectori, mane et vespere utendam. ℞. Calomel, gr. ij.; Pulv. Scammoniæ, gr. vj. M. o. n. ℞. Extracti Conii, gr. iij.: Vini Ipecac. gtt. x.; Magnes. Vitriol. ℈j.; Aquæ, ℥j. M. ter die capiat.—4th. Decided pertussis, and very severe; has great pain of the head: is much emaciated. Fits last about half an hour. Applicentur Hirudines iv. fronti. ℞. Pulv. Scammoniæ, gr. vj.; Calomel, gr. ij.; o. n. ℞. Ungt. Antim. Tartar, pectori, mane et vespere.—6th. Does not hoop near so often as before, about six times the last twenty-four hours; her spirits are much better; slept pretty well; but is quite afraid of the cough; head better; motions natural. Persev. cum pulvere, o. n. u.a. ℞. Plumbi Superacetatis, gr. j.; Tinct. Digitalis ʒj; Aquæ, ℥iij. M. sumat ℥ss. 6tis horis.—9th. By account, better: skin has come out in an eruption. Cont. cum mistura u.a. et rept. pulvis, o.n. u.a.—11th. Hooping and cough better; less pain of the head, eyes clear, bowels open. Repetantur Hirudines ij. fronti. ℞. Calomel, gr. ij.; Pulv. Rhei, gr. iv.; Pulv. Antimonalis, gr. ijss. M. o.n. sumat. Omitt. alia.—14th Severe pain of head; and she hoops much oftener now than she did three days ago; twelve times last night, and more violently: sleeps well; eyes look heavy; eruption gone. Leeches ordered on the 11th, did not bite at all. Repetantur Hirudines ij. fronti. Pergat. cum mistura ut December 6. inter alia.—16th. These leeches bit very well; decidedly better to-day, and has hooped only twice yesterday; since the leeches fell off, has made much water. Pergat. cum Calomel et Scammoniæ, gr. v. o.n.—18th. *No hooping*: cough much better; no pain of head; begins to run about with the other children. Cont. cum pulvere o.n. Omitt. mistura.—23d. Only very slight cough, about twice a-day; gets flesh and colour; quite well. Omitt. medicamenta. —27th. No return of disease. Cured.

MELANGE.

On the use of the Tinctura Ferri Muriati in those Suppressions of Urine which arise from a Spasmodic Affection of the Urethra. From the Lectures of the late Mr. Cline.

A grazier, about thirty-five years of age, had a stricture in the urethra during several years, for which bougies were occasionally used. He was attacked with a retention of urine, which continued nearly forty-eight hours without his obtaining any relief, although trial was made of all the usual remedies. This attack was soon followed by another of the same kind, and the warm bath, opiate clysters, &c. were as ineffectual as before, the urine being never evacuated until his strength appeared almost exhausted by the complaint. At other times, with the aid of bougies, he voided his urine in a favourable stream, and one of moderate size could be passed without difficulty; but during the spasmodic state of the stricture, neither a drop of urine passed, nor could the smallest bougie be introduced. The return of spasm of the urethra became afterwards more frequent, and each time the retention of urine lasted so long as to endanger the life of the patient. From the frequency of this complaint, and its supposed danger, he removed to London, and in a few days after his arrival, was seized with a retention of urine as before. As the common methods of treatment had no effect in this case, it was at once determined to try an unusual remedy, and a tobacco clyster was directed. This produced languor, a cold sweat, faintness, and insensibility; from which he recovered in about an hour, and soon after voided his urine without difficulty. However, in a few days he had a return of the retention, and the clyster was again proposed; but being extremely averse to its use, on account of the very distressing symptoms which it had before produced, it was proposed to give him ten drops of the tinctura ferri muriati every ten minutes, until it produced some

sensible effect. When he had taken six doses of it, *i. e.* in an hour, he had an irritation to void his urine, and it immediately flowed freely; although in every preceding attack the complaint had continued about forty-eight hours, except when the tobacco clyster was given. He had several relapses of the complaint, and was each time relieved by taking the above medicine in similar doses, and became so confident that he possessed a specific for his disorder, that he no longer felt any apprehension about its consequences.

"This medicine has since been given in several similar cases with equal success; but in all, the complaints were purely spasmodic. Retention of urine from other causes cannot be affected by it."

A Trance.—Dr. Crichton, physician to the Grand Duke Nicholas, brother of the Emperor of Russia, relates that "a young girl, in the service of the Prince of ——, who had for some time kept her bed with a nervous affection, at length to all appearance was deprived of life. Her face had all the character of death,—her body was perfectly cold, and every other symptom of the "Grim King" being in possession, were manifested. She was removed into another room and placed in a coffin. On the day fixed for her funeral, hymns, according to the custom of the country, were sung before the door; but at the very moment they were going to nail down the coffin; a perspiration was seen upon her skin, and in a few minutes it was succeeded by a convulsive motion in the hands and feet. In a few moments she opened her eyes and uttered a piercing scream. The faculty were instantly called in, and in the space of a few days her health was perfectly re-established. The account she gave of her situation is extremely curious. She said she appeared to dream she was dead, but that she was sensible to every thing that was passing round her, and distinctly heard her friends bewailing her death; she felt them envelope her in the shroud, and place her in the coffin. This sensation gave her extreme agony, and she attempted to speak, but her soul was unable to act upon her body. She describes her sensations as very contradictory, as if she was and was not in her body at the same instant. She attempted in vain to move her arms, to open her eyes, or to speak. The agony of her mind was at its height when she heard the funeral hymn, and found that they were about to nail down the lid of the coffin. The horror of being buried alive, gave a new impulse to the mind, which resumed its power over the corporeal organisation, and produced the effects which excited the notice of those who were about to convey her to a premature grave.

OBITUARY.

On Sunday, 23rd inst. at his house, Pimlico, W. R. Morel, Esq. one of the Surgeons to the Westminster Infirmary.

On the 15th inst. while walking near the Infirmary, Liverpool, JOHN CURRY, Esq. M. D. of that Town, and brother of the late Dr. James Curry, of Guy's Hospital.

On Sunday the 23rd inst. deeply regretted by his family and friends, John Haighton, M. D., F. R. S. many years Lecturer on Midwifery and Physiology in the Medical School of the united Hospitals, Southwark.

NOTICE TO CORRESPONDENTS.

Several communications are still under consideration. Z. Y. and D. D. arrived too late for insertion this week; and a press of matter has prevented us for the present from devoting the necessary attention to the valuable MSS sent us by Dr. M—, for our perusal; but which we purpose, nevertheless, to do, at an early period; as well as to avail ourselves of the important information they contain.

We will thank "PHILO-PECUNIÆ," *when he may think fit to address us again on the subject of "economy," to post-pay his Letter, as one small step towards the system he would recommend for our adoption.*

All Letters &c. (Post Paid,) addressed for the Editors, at the Publisher's, &c.

Printed by Plummer and Brewis, Love Lane, Eastcheap;

Published by COX and SON, St. Thomas's Street, and 39, High Street, Southwark. Sold also by Sherwood, Neely, and Jones, Paternoster Row; Simpkin and Marshall, Stationers' Court; Callow and Wilson, Prince's Street, Soho: John Cox, Berner's Street, Oxford Street; E. Wilson, Corner of Royal Exchange: W. Turner, Cheapside; T. Boys, Ludgate Hill; H. and W. Smith, 192, Strand; G. Roake, 31, Strand; Sams, St. James' Street; W. Stewart, South Bridge St. Edinburgh; and Hodges and M'Arthur, Dublin.

THE WEEKLY

MEDICO-CHIRURGICAL & PHILOSOPHICAL MAGAZINE.

No. IX.] SATURDAY, APRIL 5, 1823. [*Price 4d.*

" FLORIFERIS, UT APES, IN SALTIBUS OMNIA LIBANT
OMNIA NOS, ITIDEM, DEPASCIMUR AUREA DICTA."

CASES FROM THE APPENDIX OF THE SECOND EDITION OF SIR A. COOPER'S WORKS ON DISLOCATION AND FRACTURES, (JUST PUBLISHED.)

(Continued from page 114.)

My dear Sir,—I take this opportunity of giving you the particulars of the case of dislocation on the pubis, which you wished for. Charles Pugh, aged 55, a cooper, about the middle size, on the evening of the 23rd January, during the time he was making water at the corner of a street, was struck on the back part of the right hip by the wheel of a cart; the blow knocked him down. He was taken up by some persons passing, who, finding that he was not able to walk, took him to St. Thomas's Hospital. The accident happened about nine o'clock in the evening, and I was sent for between twelve and one o'clock, when I found a dislocation of the right femur on the pubis, the particulars of which were as follows:—the head of the bone could be distinctly felt below Poupart's ligament, immediately to the outer side of the femoral vessels. The foot and knee were turned outwards, with very little alteration in the length of the limb. The thigh was not flexed towards the abdomen, and was almost immoveable, admitting only of partial adduction and abduction. The limb could be rotated outwards, but not at all inwards. I immediately had the man taken into the operating theatre, and speedily succeeded in reducing the dislocation by the following means: the patient was placed on his left side, a broad band was passed between the thighs, and being tied over the crista of the ilium on the right side, was made fast to a ring fixed to the wall. A wet roller having been put on above the right knee, a bandage was buckled over it, and its straps attached to the hooks of the pullies, by which a gradual extension was made, drawing the thigh a little backwards and downwards. When this extension had been kept up a short time, I directed another bandage to be applied round the upper part of the thigh close to the perineum, by means of which the head of the bone was raised, and in the course of a few minutes the reduction was easily accomplished. The patient had not been bled or taken any medicine, he suffered but little after the reduction, and was able to walk without pain or inconvenience five or six days afterwards. On the day following the accident he could move the limb freely in all directions without pain, but did not attempt to walk until the period I have mentioned.

If I have omitted any points, or you have any wish for further particulars, a message or a note by post, will much oblige your's, very sincerely, FREDERICK TYRRELL,

Surgeon to St. Thomas's Hospital.

GUILDHALL, Feb. 7, 1823.

Sir,—Permit me to send you the following case of dislocation of the thigh-bone on the dorsum of the ilium. George Davies, aged 35, on the first of the present month, in descending a flight of steps at a mill in this neighbourhood, with a sack of wheat on his back, missed a step or two, and in endeavouring to regain his footing, the whole weight of the load fell upon him, and the violence of the shock bore him down several steps lower, where he lay totally in-

capable of further motion till assistance was procured. He was then conveyed to the adjoining village. On examination, the limb was found considerably shorter than its fellow, the foot turned inwards and resting upon the tarsus of the other leg. The head of the bone was distinctly felt, lodged among the glutei muscles. All the other symptoms were unequivocal. In about three hours after the occurrence of the accident, due preparation being made, thirty ounces of blood were taken from the arm, the pullies were adjusted according to your directions, and gradual extension being made, the head of the bone was eventually brought on a line with the acetabulum; a towel was now passed under the thigh by which means the bone was elevated, and suddenly, with an audible snap, it slipped into its proper cavity. The man is going on well, but as he is still suffering from the effect of the contusion, he has not been allowed to make much use of his limb.—I am, Sir, your's respectfully, T. MAURICE.

Marlborough, Feb. 12, 1823.

P. S. The reduction was accomplished in about ten minutes.

(To be continued.)

MEMOIR.

(Continued from page 116.)

The next work of an anatomical nature from the pen of Dr. Gordon, was called forth by the claims of two German physicians, whose alleged discoveries in the anatomy of the brain, coupled with certain opinions as to the nature of its functions, had excited much interest in different parts of Europe. These gentlemen, after having made known their doctrines in the various universities of Germany, visited Paris, and exhibited to the anatomists of that city their alleged discoveries. These so far excited the attention of the National Institute, that, in the year 1808, a committee of five members, with M. Cuvier at their head, was appointed to examine and report on them. Accordingly, 'Drs. Gall 'and Spurzheim,' say the reporters, 'dis-'sected the brain in our presence, and we 'dissected it before them; and we after-'wards re-examined, by ourselves, the ob-'servations they communicated to us. The results of these examinations are embodied in three conclusions, with which the committee terminate their report. In these conclusions, the anatomical merit of Drs. Gall and Spurzheim is made first to consist, 'not in having discovered, but in 'having recalled to the attention of phy-'siologists,' opinions, long since entertained, of the *fibrous* structure of the brain, and of the decussation of certain nervous filaments of the pyramidal eminences:—secondly, in distinguishing *two orders* of fibres, of which, we are told, the hemispheres of the brain 'appear' to be composed:—and, thirdly, in 'making it probable' that the cerebral nerves ascend from the medulla oblongata, rather than descend from the brain; and that, in general, the nerves do not come originally from the brain. This small measure of praise, in which nothing new is stated to be discovered, but only certain facts recalled to attention, and some questionable opinions declared to be more or less probable, disappointed the sanguine expectations of Messrs. Spurzheim and Gall; and drew from them a quarto volume of 274 pages, wholly occupied with a criticism on the decision of the committee. I am not, however, aware that this laborious effort changed, in any respect, the opinions of the French anatomists; and yet, by many in this country, the alleged discoveries of Gall and Spurzheim have been held to receive general support from the investigations of the anatomists of France.

In 1815, Dr. Spurzheim introduced the doctrines of his colleague and himself to the notice of this country, by the publication of a work entitled, 'The Physiog-'nomical System of Drs. Gall and Spurz-'heim, by F. G. Spurzheim, M. D.' which was prefaced with a short outline of their views of the anatomy of the brain. Still farther to make known his doctrines, Dr. Spurzheim delivered lectures upon them, and exhibited demonstrations of the brain in London and Dublin; and in 1817, he made his appearance in Edinburgh. Soon after his arrival, he expressed to Dr. Thomson a wish to exhibit a demonstration of the brain, and was soon furnished with the opportunity, and accommodated with the use of Dr. Thomson's theatre for the purpose, where he gave two demonstrations of that organ. Dr. Gordon, with a great number of persons, both professional and others, were present. The dissection was made with considerable dexterity; and the order pursued in it was so different from that usually followed in this country, that it excited much interest, and impressed many with the belief of great discovery in the anatomy of that organ.

It cannot be denied, that, even by professional persons in this country, the anatomy of the brain has been studied only in a very general manner; nor is it difficult to assign a reason for it. It is justly observed by the committee of the French Institute, that 'none of those, who have examined the brain, have succeeded in establishing a rational and positive relation between the structure of that organ and its functions, even those which are most evidently physical; and the discoveries hitherto made known with respect to it, are confined to some circumstances regarding the form, connexions, and texture of its parts.' Hence the study of this organ has not commonly been carried farther than the acquisition of such a knowledge of the relative position and natural appearances of its several parts, as might be useful in the consideration of their morbid changes; and to professional men, therefore, in general, many parts of the demonstrations of Gall and Spurzheim appeared as new as to those without the pale of the professien. Nor does this ignorance of the minute structure of the brain appear to have been peculiar to this country; for Dr. Spurzheim himself, after having visited most of the great cities on the Continent, in order to make known his opinions, has taken upon him unequivocally to assert, that, 'till our days, only the *external forms* of the brain were known, and the *internal structure* of its parts was quite overlooked. Without going quite so far as Dr. Spurzheim on this point, I am ready to admit, that but few were prepared, by previous knowledge, to estimate the real merits of his demonstrations; and, consequently many were disposed to regard as discovery, all that to them was previously unknown, and to receive as demonstration whatsoever was declared to exist.

(To be continued.)

Observations on Phrenology, as affording a systematic View of Human Nature.

(Continued from page 120.)

Other, and still stronger reasons, however exist, why *serious enquiry* should be no longer delayed. The reader will bear in mind, that the general rejection of any new discovery affords no test whatever of its falsity. In proof of this, we have only to recollect the histories of the most important discoveries in medical or philosophical science. The celebrated Harvey, for his glorious discovery of the circulation of the blood, was long ridiculed and persecuted; his facts were neglected, and his theory met with almost universal condemnation. Hume mentions as a curious historical fact, that no physician, at that time, above 40 years of age, ever acknowledged his theory. Galileo was rewarded for his discovery of the motion of the earth, by persecution and imprisonment. Nor are these, by any means, solitary instances. Such occurrences are, in fact, but too common; and since such things have happened, we ought to be the more cautious, lest unwillingly, we add another to the list, even in this enlightened age.

In the next place, notwithstanding our almost total ignorance of the use of the brain, it has been universally regarded as one of the most important organs in the whole body, consequently, there has been no lack of talent or of zeal in endeavouring to ascertain its precise functions. The unceasing efforts of the most ingenious and profound philosophers, however, having, after a lapse of many hundred years, added so exceedingly little to our knowledge, we cannot but suspect that, if its precise functions are ever to be discovered, the modes of investigation hitherto in use, are not those, by which we shall be able to attain the end in view.

Physiologists are agreed, that the functions of any organ are not to be discovered by dissection alone; nevertheless, investigations of this kind ought to be conducted in such a way, as to afford, at least, a chance of discovering the *structure* of the organ, and the relation of its parts. In dissecting the brain, however, this rule has not hitherto been generally attended to. The organ is frequently examined, by slicing it horizontally, a mode of dissection, the use of which may be aptly illustrated, by supposing the same method applied in tracing the structure of the arm or thigh. What notion could be formed of the anatomy of these parts, by cutting

circular slices through skin, muscles, blood-vessels, nerves, and bone, and minutely noting the appearances presented by each different section? How, then, can anatomists expect to succeed in discovering the structure of the brain, by slicing across the convolutions, instead of following the course of the fibres from the medulla oblongata to the farthest point of divergence to which they can be traced. The method of dissection, therefore, recommended by Drs. Gall and Spurzheim, appears to us well worthy of serious attention, in consequence of its own obvious merits alone, and still more so, seeing that it has met with the approbation of the French anatomists, whose opportunities of procuring brains in a proper state for examination, enable them to decide this point upon a more extensive experience than ours.

Although, however, the structure were perfectly ascertained, the functions would not be thereby disclosed; and as the founders of phrenology pretend to have discovered the functions also, two points naturally present themselves for our consideration, previously to forming a judgment upon their assertions. First; the means which they employed in their investigations: and, secondly, the coincidence or contradiction between the results obtained, and such facts in nature as are already known and established. If the means be philosophic and adequate, we may then listen to the conclusions. Should the results stand in oppositions to established *opinions*, we ought not on this account alone to reject them, because established opinions may be erroneous; but as nature is never inconsistent, if we find *ascertained facts* contradicting the phrenological views, we shall then have a good reason for treating them with disrespect.

First, then, with regard to the means. The operations of mind never come under our cognizance, but as connected with, and influenced by, certain changes in the state of the brain, for this organ is admitted, in all systems of philosophy, to be the medium, the *sine qua non*; by means of which the mind acts upon, and is put in communication with, the external world. The immaterial principle eludes the research of our grosser senses, and we are obviously incapable of attaining a knowledge of the nature of mind as it exists in a disembodied state. All therefore that properly comes within the province of the physiologist or philosopher, is to ascertain the mutual influence of mind and organization upon each other, and the conditions of the organization required for the healthy operations of the different mental powers. Hitherto the extent of *certain knowledge* goes no farther than this, that a sound state of the brain is requisite for the sound manifestations of the mind; but whether the whole brain is requisite for every single mental act, or, if not, what particular part is required for the due operation of any particular faculty has not been demonstrated.* Dr. Gall advances still farther, and tries to prove that the latter view, viz. that of the plurality of faculties and organs is the true one, and this forms the fundamental principle of phrenology. *(To be continued.)*

HOSPITAL REPORTS.

Royal Infirmary—Edinburgh.

March.—A most tedious operation, occupying nearly two hours, was performed here a few days ago by Mr. Wishart, in a case of cartilaginous osseous tumor of the antrum. The diseased portion was extracted piecemeal, and a considerable portion of the right superior maxillary bone along with it. The actual cautery was afterwards applied; but neither knife, saw, nor cautery produced a groan from the patient, who was a young man about 25 years of age. The tumour projected into the mouth, and discharged an unhealthy fœtid pus, some of which flowed also from the right nostril. It made its first appearance about two months ago, and

* *Vide No. 3—of this Magazine.*

continued to increase under every species of rational treatment, such as scarification, caustic, &c. It is probable we may be favoured with this case in a more detailed form; at present we can say no more on the subject.

We are also informed by our correspondent, that two fatal cases from puncture in dissection have very lately occurred in the northern metropolis within a short period of each other. The usual effects, it is stated, followed close upon the wound, viz. inflammation of an erisipelatous character, &c. The one was Dr. Dusar, a lecturer in Edinburgh; and the other, Mr. Adair, a gentleman who lately appeared before the public as the author of a pamphlet relative to the means of facilitating the obtaining of dead bodies for dissection.

The frequency of these cases have lately become so alarming, that the serious consideration of the faculty ought immediately to be drawn to the subject. In the third number of our Magazine, shortly after the lamented death of Dr. Pett, we inserted a letter, addressed to us, from a respectable and well-informed physician, in which may be found some very useful practical observations, relative to the treatment of the *effects* of puncture received during dissection; but there is a mode of treatment to be adopted long before the period alluded to in this communication, of much more importance, viz. that of prevention. Unfortunately, as it too frequently happens, these apparently trifling accidents are apt to be slighted and not the least regard paid to them until absorption and consequent diseased action have already manifested themselves. It cannot, therefore, be too strongly recommended to the dissecting pupil, or those engaged in the occasional opening of bodies, *post mortem*, to pay the most rigid and immediate attention to the very minutest rupture of continuity of the cuticle during these engagements, by adopting the earliest means to prevent those lamentable consequences which have so repeatedly bereft us of some of the brightest ornaments of the profession.—Ed.

ST. THOMAS'S.

March 29th.—Amputation below the knee, by Mr. Tyrrell.—The subject, a Swedish sailor, had his foot so affected with the cold weather in January, in the river, off Limehouse, that it was deemed adviseable to send him to the hospital. Sloughing ensued, and continued extending so rapidly that the operation could not well be deferred any longer.

The particulars of a case of this description possessing no particular interest over those of a similar nature arising from the effects of a cold, we forbear entering further into its detail.

PHYSIOLOGICAL OBSERVATIONS

Some Experiments on the Effects on the Animal Economy of Substances in a state of Putrefaction.

"I have repeated M. Gaspard's experiments* with the greatest care," says M. Magendie, "and have prosecuted them with a view to their medical application: his results I affirm to be perfectly correct. Furthermore, I have observed, that different sorts of flesh in a state of putrefaction were not possessed of the same activity. The muscles of the herbivorous *mammiferæ* appear less active than those of the carnivorous. Putrefied oyster-water was not followed with very violent effects: but the most deleterious matter is putrid fish-water: a few drops of this water injected into the veins, produce, in less than an hour, symptoms which bear the greatest analogy with typhus and the yellow fever. Death commonly takes place in the twenty-four hours; and, on opening the body, we find every mark of a chemical alteration of the blood. A very considerable portion of this liquid remains fluid; it has transuded through the parietes of the vessels into the different tissues, particularly those of the mucous coat of the intestines; it has accumulated, along with the mucus, in the stomach and intestines; and presents, in these parts, the intermediate tints between the lively red and the deep black. This phenomenon merits all the attention of the physiologist; it leads us to examine the influence of the viscosity of the blood

* Dr. G. succeeded by experiments in producing in animals at pleasure, and after some pains, several of the diseases occasioned in man by putrid exhalations. The vomiting and black motions, for example, appeared evidently to be the effect of the alteration of blood caused by the introduction of putrid matter into the circulating system.

over the capillary circulation and the exhalations; it would seem to indicate that the healthy state of the blood, in which its tendency to coagulation is very strong, prevents the transudation of that liquid through the parietes of the small vessels. Another fact has struck me in pursuing these experiments: the same putrid water, so deleterious when injected into the veins, has no noxious effect, if introduced, even in a very strong dose, into the stomach or great intestine of animals. Nevertheless, I am satisfied that it is absorbed at the surface of the mucous coat of the intestines: it is not impossible, however, but that the mucus which covers the membrane and the pores of the small vessels may act as a filter, and arrest the animal particles, in a state of putrefaction, suffering only the water to pass which held them in suspension or even in dissolution. I intend to make fresh researches upon this new and interesting question. I have only as yet tried one experiment, as follows:—I took two separate ounces of putrid fish-water; this was turbid from the animal matters which it held in suspension: one of the two portions I filtered through paper, which rendered it nearly limpid. I injected both liquids into two dogs, which were nearly under similar circumstances, as regarded age, size, &c. The animal which received the filtered liquid was affected with much less severe and more prolonged symptoms than that into which the unfiltered water was injected. The latter died six hours after the injection; the other lived two days. Simple filtration through paper had therefore some influence; and it may be reasonably supposed, that if it had been more perfect, the putrid water would have entirely lost its noxious qualities. The pulmonary mucous membrane and the tissue of the lung were alike in each case. An equal quantity of the same putrid water injected into the veins, or introduced, with proper precautions, into the divisions of the bronchiæ, did not produce the same results. Injection into the lung produces less serious consequences than injection into the veins. This does not take place, however, in liquids not susceptible of decomposition, or, more correctly, which cannot be modified by filtration: the effects are nearly similar, whether they be introduced into a vein, or injected into the trachea. The study of the effects on animals of effluvia or miasmata which arise from matters in a state of putrefaction, is a species of research which may lead to very important results. Some trials of this nature I performed in the course of last summer. I arranged a cask in such a manner that its bottom should contain putrefied matter; and above these an animal was placed, on a grating with a double bottom, exposed to the miasmata which continually escaped from it. On this grating I at first placed pigeons, rabbits, and guinea-pigs. Their food was choice and abundant. None of these animals experienced the least accident, although they were retained there nearly a month, and I had kept up a very active *focus* of putrefaction at the bottom of the cask. I then placed on the grating a healthy dog; it was well fed, frequently visited, and caressed, in order that it might patiently support its captivity. For the first four days it endured its situation tolerably well; but afterwards began to grow emaciated; and although it preserved its cheerfulness and appetite, it died, as it were, of emaciation *(exténué)*, at the end of ten days. It presented no symptom which could recal to us the effects of putrid substances injected into the veins; there was no black vomiting: in short, it died evidently from the influence of the miasmata which it respired and swallowed with its food. Dissection exhibited an almost total absence of fat, of aliments in the

stomach, and of chyle in the lacteal vessels and thoracic duct. The intestinal mucous coat was inflamed, but much less so than in the case of putrid injection into the veins. I have several times performed this experiment, and the results have not sensibly differed, except as regarded the period of death, which did not take place in one instance until the twentieth day. I ought not to omit one remarkable exception. A dog, three years old, experienced no derangement in health, during a stay of six weeks in the cask; he became, as it were, seasoned *(acclimaté)*. In order to be satisfied whether he was really unsusceptible of the effects of substances in a state of putrefaction, I injected into his veins a quantity of putrid liquid more than sufficient to occasion serious symptoms, and I was not a little satisfied to find him experience scarcely any effect from it.

"From the preceding facts, it seems that liquids in a state of putrefaction, when injected into the veins, cause the death of animals, or excite symptoms which bear the greatest analogy to those of yellow fever and typhus; that the long continued respiration of putrid miasmata likewise produces death, but in a much longer time, and with symptoms which do not remind us of the diseases I have mentioned. To what can a difference in the *modus operandi* of the same substances be owing? Why this diversity in the action of their deleterious property?

"It would be extremely important to be able to resolve these questions, as in them consists the whole of the difficulty, relative to the endemic diseases which have recently occupied the attention of the public. Amongst the conjectures which might be made to resolve them, there is one which merits particular attention. It may be presumed that different conditions of the atmosphere, particularly temperature and hygrometry, may have a great influence upon the *modus operandi* of pure miasmata. Some experiments on this subject I have instituted, of which I shall give an account on a future occasion."—*Journal de Physiologie, par Magendie, Jan.* 1823.

Case of Cynanche Laryngea. By Alex. Cockburn, *Surgeon, Edinburgh.*

The frequent occurrence, and often fatal termination of this formidable disease, with the comparative small number of cases that have been published, will, I hope, be sufficient apology for my intruding the following on the pages of your valuable Journal.

Mrs. ———, ætat. 53, a married lady, with a grown-up family, of spare habit, and delicate constitution, was, on the 24th of September, attacked with common sore throat, viz. the tonsils and uvula swelled and inflamed, deglutition painful, with slight symptomatic fever. The usual remedies were employed, consisting of astringent and acid gargle, ammoniated liniment to the external fauces, cooling laxatives, and spare diet. Under these, with a blister to the throat, the inflammatory symptoms, by the 30th, had entirely subsided; and she was altogether so free from complaint, (with the exception of the blister continuing to discharge), that permission was given to leave her bedroom, to which, during her illness, she had been confined. On the following morning, however, I was sent for to see her immediately, being extremely ill. Unfortunately, not being at home, some hours elapsed before I arrived. On entering the room, I was struck with the change in her appearance. She was sitting up in bed, labouring under great difficulty of breathing; her voice was hoarse, and scarcely audible; her face purple and bloated, and her countenance expressive of the greatest distress. She complained of severe pain about the larynx, with total inability to swallow,

the slightest effort threatening suffocation. These alarming symptoms had come on suddenly during the night, and had since been increasing every hour. On examining the throat, no appearance of swelling or inflammation could be discerned; but, on depressing the root of the tongue, she felt intolerable pain, pointing with her finger externally above the thyroid cartilage as the seat of it. Her pulse was about 130, and small; tongue white, skin hot, and dry; and she was constantly endeavouring to hawk up a tough, stringy mucus. Seeing the nature and urgency of the case, I procured a number of leeches, and applied fifteen of them to the region of the larynx; while I directed her to inhale the vapour of warm water impregnated with vinegar. After continuing this for some time, she was enabled to get over, at intervals, about ʒi. sulph. magnes. in solution. The leeches bled well, which was encouraged by the application of warm cloths. Fourteen ounces of blood were likewise taken from the arm; and a saline mixture, with ant. tart. prescribed; of which a table-spoonful was directed to be given every second hour.

In the evening the symptoms had abated but very little; respiration continued difficult; pulse equal in frequency; and deglutition was attended with the greatest agony. The continued accumulation of mucus in the throat gave her much uneasiness, exciting cough, and a constant desire to hawk up. The blood drawn was cupped, and covered with a buffy coat. A considerable discharge had followed the application of the leeches, several of the orifices from which still continued open and bleeding, and the sulph. magnes. had procured several loose stools. The warm vapour she continued to inhale with apparent relief; as, after its application, the mucus was much more easily brought up, and she was able to swallow a little fluid. The feet and legs were directed to be well fomented, and the mixture continued.

Oct. 2d. Has had a bad night, slept none, but in constant fear of suffocation, being obliged to be raised from time to time to assist respiration; deglutition very painful; pulse 120, and feeble, tongue foul, belly open; face pale, and countenance peculiarly anxious; voice hoarse and shrill; a blister to be applied along the trachea to the sternum. Cont. mist. u. a.

3d. Has had no sleep, and appears this morning much exhausted; breathing hurried, and difficult, pulse quick and irregular, tongue covered with a brown crust, deglutition painful. Sulph. Magnes. was repeated during the night, which has operated freely this morning; blister has risen well. —℞ Ammon. ppt. ℈ij. Acid. citric. Q.S. ad satur. Spt. æther nit. ʒss. Syrup. com. ʒi. Aq. font. ʒvi. M. Capiat cochlear. magn. omnia 2da hora et habeat haust. anodyn. ant. h. s.

4th. Has had some refreshing sleep during the night. Breathing and deglutition much easier; has taken some thin arrow-root, with gruel and tea occasionally; blister discharging copiously; pulse 112, and soft, skin covered with a warm moisture, tongue cleaning at the edges, bowels open; is spitting up an immense quantity of mucus, with great relief.

5th. Slept well; voice more natural, and hoarseness diminishing; breathing soft and equal; an immense discharge of saliva, being obliged to have her handkerchief constantly at her mouth; feels her throat much easier, and swallows fluids with more freedom; pulse 104, and soft, belly open, tongue not so foul. Cont. mist. et. haust.

6th. Has had a tolerable night; breathing soft and easy; pulse 96; tongue much cleaner; skin natural; still considerable flow of saliva; belly rather bound. Habeat infus. sennæ cum supertartrate potassæ ʒii. omni 2da hora donec alvus respond.

7th. Slept well; tongue clean, bowels open, swallows fluids readily, but finds difficulty in getting over any thing of more consistence than arrow-root or gruel; takes chicken broth, jelly, &c. Omitt. med.

8th. Has had a good night, and is in every respect better; blister still discharging; salivary discharge diminishing.

9th. Slept well; complains of great weakness; still unable to swallow solids; no appearance whatever in the throat of disease; takes beef-tea, arrow-root, jelly, &c. Cont.

10th. Convalescent. Although from this period her recovery was progressive, yet it was extremely tedious from the very debilitated state to which she was reduced; and a considerable time elapsed before she could swallow solid food, from the tender and irritable state of the parts. In this case, the disease appears to have passed from cynanche tonsillaris into that of laryngea. It did not show itself, however, until the symptoms of the former had entirely disappeared, —as on inspection the morning of attack, no inflammation whatever was to be discerned on the tonsils, uvula, or velum palati, or, indeed, throughout the continuance of the complaint, the inflammation apparently being confined to the larynx from the symptoms present, and likewise from the patient pointing out the seat of her pain and uneasiness. In the treatment, the most decided advantage was derived from the leeches and blister acting immediately on the parts affected, while the constitutional symptoms were relieved by the general bleeding, purging, and diaphoretic mixture. The occurrence of the increased secretion from the salivary glands on the acute symptoms subsiding, was rather remarkable, no mercurial preparation whatever having been given. Before concluding these hasty observations, I beg leave to make my acknowledgments to Dr. Thomson, who saw the patient with me several times in consultation; and likewise to my friend Dr. Ballingall and Dr. Donald M'Intosh, who took considerable interest in the case.

Edinburgh Med. and Surg. Journal.

Case of Cynanche Laryngea—By WILLIAM GAITSKELL, *Fellow of the Royal College of Surgeons, &c.*

W. G., forty-six years of age, dark complexioned, and of an inflammatory diathesis, was attacked suddenly, about eight in the evening of Sunday, February 11th, 1810, with a pain on the right side of the root of the epiglottis, which, at first was only felt at the time of deglutition. A month previous to this he had been much exposed to the inclemencies of the weather, particularly at night, which was cold, wet, and variable. By this was induced a catarrhal affection, with occasional sneezing and uneasiness in the frontal sinues, but without any general illness. When the pain in the throat commenced, the other irritations subsided. About twelve at night, four hours after the attack, rigours came on, succeeded by heat, and extension of the inflammation to the epiglottis, palatine arches, tonsil, velum pendulum, and uvula. The violence of inflammatory action, on organs so delicately constructed, created alarm, and professional aid was requested. About one in the morning, blood was taken from the arm, the movement of the bowels promoted by calomel and purgative medicines. At seven the next morning, there being no mitigation of symptoms, but an increase of the febrile action, the bleeding was repeated. About one in the afternoon of Monday, Dr. Babington, Sir Astley Cooper, and Mr. Joseph Gaitskell, very kindly combined their opinions, and recommended, the constitutional symptoms being abated, the application of leeches to the throat, with scarifications of the tonsils and uvula; and these to be assisted by hot

stupes of chamomile tea and the frequent inhalation of vapour, while the calomel and purgatives were continued. By these means some dark-coloured motions were procured; but the blood appeared perfectly healthy. At ten the same evening the professional gentlemen visited their patient, and finding the fever increased, with great irritation of the glottis, and the power of articulation suspended, they ordered a repetition of bleeding, a blister to the throat, antimonial powders every four hours, with pediluvia, and the purgative in the morning. In a few hours a slight perspiration came on, which it was found impossible to encourage, from the restlessness of the patient, and the inability to breathe except in an upright position of the trunk. The body was supported by a bed-chair to prevent suffocation, which the œdematous state of the uvula and accumulation of mucus threatened. The internal fauces were frequently lubricated by barley water carefully swallowed; and the cold pulp of roasted apples was found peculiarly grateful. These liquids occasioned great pain in deglutition and a teasing irritation to cough. In fact, deglutition was difficult and highly distressing, requiring the nicest attention, both in selecting the consistency of the fluid, and the mode of performing the office. On Tuesday the symptoms were relieved, but in the evening a fresh exacerbation coming on, the bleeding was obliged to be repeated. The night was passed with an abatement of fever, but with great inquietude, from the accumulation of mucus in the throat. The next morning, Wednesday, every symptom was moderated, and convalescence seemed nearly approaching; but, with the evening, the difficulty of respiration again returned, with such irritation of the tracheal membrane, as to endanger suffocation. Bleeding was restored to again, when slight deliquium came on, and the symptoms immediately yielded. From this time inflammatory action ceased, copious secretion took place both from the fauces and tracheal tube, which, by its viscidity and quantity, was so distressing as to require the aid of an emetic. In a few days the secretion ceased, and convalescence was complete.

Case of Tic Douloureux, successfully treated by Purgatives.—By ANDREW WILSON, *M. D. Senior Physician to Kelso Dispensary.*

In my Letters on Morbid Sympathy, published in 1818, when remarking on the subject of chronic rheumatism; having there expressed an opinion, that the disease designed tic douloureux, is a morbid sympathy, depending on a primary cause, seated in the digestive organs; mentioning, at the same time, some instances of recovery, by a treatment founded on that principle. In corroboration of this idea, I take the liberty at present of transmitting to you the accompanying case, as a further demonstration of the origin of that excruciating and unmanageable disease, if you choose to give it a place in the Medical Journal.

1822, July 5th. Peter Storry, a farm servant, æt. 18, is affected with tic douloureux in a most severe degree. He describes the pain as always commencing at a point in his upper lip, on the right side, where it is joined by the alæ of the nose, from which it spreads upward with great violence, shooting along his cheek to his temple, and over the whole side of his head, the pain being so violent as to make him cry out in great agony. It attacks him repeatedly in the course of the 24 hours, in paroxysms of several hours duration; and even during the intervals, the pain remains with very considerable severity. He has been subject to occasional attacks of the same kind, in an inferior degree, for 16 years, of shorter duration than the present, and with in-

tervals of some weeks, and even many months at a time; and he has observed, that exposure to cold and wet weather very readily excite a return. The present fit of the disease came on about the middle of May last, without his being able to ascribe it to any occasional cause. Since which time, to the present day, his time has passed under constant severe pain, and part of every day under intense torment.

At present his pulse is natural, and his skin cool. His tongue is loaded with a thick membranous fur, in so far as it is visible, as the smallest motion of his tongue or lips, in attempting to speak, or take in food, is certain of exciting a paroxysm; in consequence of which deprivation, together with the want of sleep, his strength has become greatly impaired.

He has been following medical advice at home for six weeks past, during which time he has used laxatives freely, chiefly saline, with some doses of calomel; he has also had an emetic or two, which did not operate freely. These have been followed with carbonate of iron in considerable quantity, viz. one drachm thrice a day for two weeks. Of late, this has been changed for the arsenic solution, taken freely without any benefit.

On the 5th of July, he was admitted a patient in the Dispensary here, and came to be under my care. It appearing quite certain, on examination, that his digestive organs remained loaded with an accumulation of morbid contents, and believing that the primary cause of his misery still existed there, notwithstanding the extensive evacuations which had been procured by the lenient purgatives already administered, it became necessary to have recourse to some more powerful remedy. Accordingly, with the concurrence of the other medical gentlemen, he was ordered to take the following bolus next morning. Calomel gr. vij. tart. antimon. gr. i. M. ft. bolus. By this dose he vomited a considerable quantity of dark-coloured corrupted bile, and had three very offensive stools. He slept a little in the succeeding night, and passed the next day with some mitigation of his complaint, in thus far, that although the lancinating pains shooting from his lip along his cheek and temple, were as frequent as ever, yet they were less severe, and he had no regular excruciating paroxysm.

The bolus to be repeated every other morning, also to receive an enema, with 50 drops of tinct. opii every night.

By the second and third doses, he vomited dark coloured bile each day, and voided offensive stools, mixed with a great quantity of hard scybalæ. By the fourth and fifth doses, he continued to vomit unhealthy looking bile, mixed with viscid phlegm; he also passed offensive stools mixed with scybalæ as before. He is now much relieved, being able to speak, and to take food without exciting a fit of pain, and rests well in the night; his tongue is considerably cleaned from the thick fur, and he is able to walk about in his room. There are some slight returns of pain along the side of his face, but no regular paroxysm for eight days past. By the sixth and seventh doses, the discharges were less offensive, wearing a more healthy appearance; his tongue is clean, and his night rest natural; the occasional transient pains slight, and less frequent; is still gaining strength, being now able to walk out. July 29th. Ordered to omit the mercurial bolus, to continue the sedative enema, and take pulv. cinchon. ʒi. every twenty-four hours, in small doses, with an opening pill occasionally, if necessary. August 10. Continues better; is permitted to return home. Continue the p. cinchon. with i. gr. of opium every night, in place of sedative enema. Sept. 1st. Has used his medicine regularly; is much stronger, being now able to undertake

easy work. Ordered to omit the cinchona, and use the following tonic electuary. Limat. ferri ʒi. Crem. tart. ʒiij. Pulv. cinchon. ʒiss. Pulv. zingib. ʒiss. Syr. commun ʒij. elect. A small tea-spoonful three times a day. Sept. 15. Continues free from pain, and has acquired a very healthy appearance. Oct. 2. Continues well. Dismissed.

Edinburgh Med. and Surg. Journal.

Case of Poisining by Laudanum, in which blood-letting was efficaciously employed.—By W. M. Ross, *Esq. Surgeon.*

William Moncreiff, ætat. 40, seaman on board a revenue cutter, having squandered all his pay on shore at Leith, and thereby left his family destitute, formed the desperate resolution of destroying himself. For this purpose, on Sunday, the 10th Feb. last, he procured an ounce of laudanum from an apothecary in town, about two o'clock in the afternoon. Thinking, probably, the quantity insufficient for his purpose, he returned to the apothecary's about four o'clock, and obtained another ounce. As he appeared intoxicated, the apothecary sent one of his boys to ascertain whether the laudanum was not for himself, as he stated it was for his captain, and that he had broken the phial containing the first ounce. On the way, however, he forcibly took possession of the phial containing the laudanum from the boy, and retired to a tavern in the neighbourhood.

He appears to have swallowed the two ounces between four and five o'clock in the afternoon. He had stated to the people of the house where he then was that the medicine was for a very different purpose; but, becoming soon afterwards very drowsy, and incapable of being roused, they naturally inferred his dreadful purpose, and sent for the druggist from whom he had procured the laudanum.

Mr. Milner saw him about six o'clock. He immediately administered two scruples of the sulphate of zinc in solution, which, not appearing to operate speedily enough, he repeated the dose with a double drachm; and, having forced him to swallow large and repeated draughts of warm water, he vomited copiously. Two persons were appointed to shake him continually to prevent him from sleeping; repeated doses of tartar emetic were exhibited, and the epigastric region rubbed with tobacco-juice.

This treatment was continued till about half-past eight, when Mr. Milner sent for me. On my arrival, I found Mr. Galloway was already there, and that he had administered a solution of the sulphate of copper, which had operated powerfully. The countenance of the patient at this time presented a cadaverous appearance; the mouth and lips were pale and tumid, the conjunctiva inflamed, probably with the vomiting. Pulse about 100, irregular, but full. Respiration very deep, and sonorous. The muscles were in a complete state of relaxation, and he was obliged to be supported in a chair. He made no answer to any question, although put to him with a loud voice close to his ear. On discontinuing the agitation for a moment, he immediately relapsed into a state of stupor and insensibility. The only expedient which effectually roused him, was pulling him by the hair of the head. This was so completely successful on one occasion, that he rose from his seat in a paroxysm of anger, and attempted to throw off his jacket and vest, but immediately fell back in a state of insensibility.

About nine o'clock the coma became deeper, breathing more laborious, the face and lips assumed a more livid complexion, the pulse fell rapidly, and intermitted. In a word, he had the appearance of a man dying of compression of the brain. These symptoms induced me to suggest the propriety of blood-letting, with which Mr. Galloway having readily concurred, I took away about ʒ xvi.

Immediately after the operation the pulse again rose to about 100, respiration easier, and the other symptoms of oppression were diminished, and continued to abate until about ten o'clock. He had then so far recovered, that Mr. Galloway and myself left him in charge of a young medical gentleman, who was directed to exhibit the diluents from time to time, with small doses of the sulphate of zinc. Continued agitation was practised until near three in the morning, when the cumatose symptoms having vanished, he was able to recognise the different individuals around him, and walked home, with support, to his own house, a few streets distant. Next morning he was sent to the Royal Infirmary, Edinburgh, but was discharged in a day or two.

This case differs from two detailed in this Journal by Mr. Richardson, (Vol. XVII. p. 226.), in which venesection was efficaciously employed; in the one case half an ounce of laudanum having been swallowed, and in the other not more than three drachms. The patient here was a stout man, of active habits, and had formed his desperate resolution in a moment of intoxication. In the other cases the patients were females, one of whom had become a sufferer by accident. The deleterious principles of the opium would, in the present instance, be exposed to a more extensive surface within the stomach, in consequence of its ready union with the contents of that viscus. No acid was employed to correct the energy of the drug; and, as we know from the experiments of MM. Orfila and Sertuerner, that vinegar increases the activity of opium when taken into the stomach, it is fortunate this substance had not been made use of. Oil had been administered; but upon no principle could this be of any service, as it would be almost immediately ejected.

I am convinced, that had more blood been taken away in this case, the comatose symptoms would have been more speedily and decidedly lessened. As it was, the effects of the depletion were most evident. This fact is of some moment in cases where immoderate doses of opium have been taken, either accidentally, or for the purpose of self-destruction. Whether the soporose state which ensues be the effect of determination to the brain, or sympathy of that organ with the stomach, it is not here my province to inquire; although the coma and convulsions which supervene would naturally lead us to infer the former supposition. It is enough, that the inferences to be drawn from the experiments made by Orfila by the lower animals, as to the direct and immediate influence of blood-letting, when opium has been taken into the stomach, and begun to affect the system, appear to be happily confirmed, when the same remedial mean is had recourse to on the human subject. Such is the conclusion to be deduced from Mr. Richardson's cases as well as the present; and the interests of science, not less than those of humanity, depend on the relation of such important facts. It is to be hoped, that future experience will decide as to the confidence which should be placed in this remedy, which promises to be a powerful auxiliary to the other curative means.

Edinburgh Med. and Surg. Journal.

Case of Poisoning by Arsenic.—By W. Buchanan, *Esq. Fellow of the Royal College of Surgeons.*

On the 8th of December last, I was requested by a woman to see her husband immediately—she feared he had taken poison, as he had vomited some white powder, and was in much pain. I found him rolling on the floor, and by his actions expressing great pain at his stomach, and nausea. The matter he had vomited seemed to be chiefly water, but having considerable deposit, consisting of perhaps two or

three drams of powder. He would give no account of it, or of himself. His pulse was languid; his tongue and mouth clean: his skin was covered with cool perspiration. In the course of fifteen or twenty minutes I gave him, in divided portions, a solution of four drams of sulphate of zinc in six ounces of water. As this was much against his will, some of it was lost, but three drams of the salt were taken, before free vomiting took place, when two or three more drams of the powder were brought up. Until this time no other fluid had been given—it was not easy to get him to take what was judged the best remedy, the emetic, and it was thought the giving of fluids might increase the activity of the poison. Now that vomiting was frequent, he was allowed warm water, and no more of the white powder was present when it was rejected. He took some cathartic pills, and half dram doses of pure magnesia, a course of practice recommended by Mr. Hume with whom it had been successful. I was not aware of its manner of operation, except it might render the arsenic, or white lead, less soluble, and one of these substances, from its gravity (the only means I then had of estimating it), I judged it to be. On examining the powder, of which I still possess a quantity, I had no reason to doubt that it was the white oxyd of arsenic. I sublimed some; I formed Scheele's green with copper by another part, and I was satisfied of its garlicky odour on being heated. My patient took seven or eight half dram doses of the magnesia—his vomiting ceased soon after its first exhibition—his bowels were soon well cleared, all pain rapidly subsided, and on the next day he had no other complaints than might be fairly attributed to the soreness produced by vomiting, and the distress resulting from his conduct. Since so much of the case was penned, I have had an opportunity of ascertaining that he obtained at a druggist's in the neighbourhood an oz. of arsenic: he mixed it with milk and water, and swallowed very near the whole. In about half an hour vomiting began, and a few minutes after that period I saw him. It is assuredly a curious circumstance, that so large a portion of so violent a poison (and its genuineness has been ascertained by a reference to the druggist who dispensed it, and by the examination of Dr. Babington) should have been taken into the stomach and not have produced more serious effects:—it is not for me to say what share in preventing it should be attributed to the full, free, and almost dry vomiting induced, or what is the probable value of magnesia as an antidote; my object in giving this recital having been merely a statement of the facts.

5, *Finsbury Terrace, March* 13, 1823.

Example of a REMARKABLE FACT *in Midwifery. By* JAMES SCOTT, *Esq. Surgeon, Westminster.*

"In January, 1818, my attendance, during labour, was requested upon the wife of Mr. Dunn, surgeon of the Herefordshire militia. The head of the child had made its turn in the pelvis (the face lying in the hollow of the sacrum), and the membranes had broken, when the feeble cries of the infant called the attention of the persons present. The mother conceived that the head of her infant had emerged from its fœtal existence, while others believed that delivery had taken place: subsequent pains propelled the head to the outlet, during which the voice of the child was again heard, and the os externum becoming sufficiently dilated, delivery was effected, *twenty minutes* after the first cries of the infant were emitted!!!!!

*** With every deference to the authority before us, as soon should we believe that the child had danced a hornpipe *in utero*, as that it had sung a song with its head jammed in the pelvis. *Quere*, might the faculty of auscultation not have been deceived by the musical commotion or escape of intestinal *gas* during the parturient efforts?

Obstinate Constipation successfully treated by the Oil of the Croton Tiglium. By W. C. DENDY, *Esq. Surgeon to the Royal Universal Dispensary for Diseases of Children.*

"I was lately requested," says the above gentleman, "by a medical friend, in the vicinity of Covent Garden, to see a young woman, aged sixteen years, whose bowels had been in a complete state of constipation for three weeks, during which time various purgative medicines had been administered by this medicine: in fact he had tried all the common remedies for obstructions of this nature, together with the warm bath and enemata. According to her own account, she had swallowed, previously to the means used by this practitioner, and immediately before his assistance was required, about three-fourths of an ounce of powdered jalap, two ounces of castor oil, and a box of Scott's pills, in different trials at obtaining an evacuation, without the least effect.—When I saw her, the febrile symptoms were very high—the abdomen was much tumefied—pain very much increased on pressure—the tongue loaded—countenance flushed—intolerance of light—throbbing carotids, and other symptoms of cerebral disturbance. In order to relieve these last symptoms, leeches were applied to the forehead and temples, and acetic lotions to the head. Half a drop of the ol. crotinis tiglii was ordered to be taken every third hour; and after the third dose it was combined with a mixture of the ol. ricini. The contents of the bowels were profusely evacuated, consisting of scybalæ, and afterwards of fœtid bilious motions. She took nothing else as the symptoms were immediately relieved, and she was convalescent in a day or two."—*Great Eastcheap, Feb.* 1823.

Proceedings of Philosophical Societies.

Feb. 20.—The reading of a paper, entitled, Experiments on the Velocity and Force of Sound, made at Madras, by John Goldingham, Esq. FRS. was resumed and concluded.

Mr. Goldingham commenced his paper with an account of former experiments, calculations, and assertions, relating to the velocity and force of sound, upon the diversities of which, he stated the experiments he was about to detail would throw some light. He had made some experiments in the years 1793 and 1796, but the results of them had not been published, and more favourable circumstances for the prosecution of the enquiry had since occurred. The experiments and attendant observations on the subject, which Col. Beaufoy, in the *Annals of Philosophy* for Sept. 1814, had recommended to be made in England, Mr. G. had instituted at Madras.

The observatory at Madras is peculiarly well adapted for the requisite experiments and observations: it is situated in 80° 17′ 21″ E. long. and 13° 4′ 91″ N. lat. between Fort St. George and the artillery cantonments at St. Thomas's Mount; being distant from the former 13,932⅔ feet, and from the latter 29,547 feet. These distances were determined by a precise measurement, founded on part of Col. Lambton's Trigonometrical Survey.

At the Fort, as is usual in fortified places, a gun is fired morning and evening; in the morning at day-light, and in the evening at eight o'clock; at the artillery cantonments, a gun is fired at sun-rise and at sun-set. The guns are both 24 pounders, are each charged with eight pounds of powder, and are pointed, though not exactly to the observatory, yet very nearly in its direction. The distance of the Mount gun from the observstory being about double that of the Fort gun, a good opportunity was afforded of determining whether sound travels at the same rate through paths of different length.

The observations were made with Arnold's chronometers, usually making 100 beats in 40 seconds; smoetimes there were three observers, the author and two Bramin assistants at the observatory, but more commonly there were only two. Each of them began to count on seeing the flash of the gun, and ceased on hearing its report; and then wrote down his observations without communicating it to the other; the observations were afterwards given to Mr. G. for registration. The states of the barometer, thermometer, and hygrometer, the direction of the wind, and the general state of the weather, were noticed at the time of each observation.

Mr. Goldingham gave, in eleven tables, the results of the observations thus made; from which it appears that the mean velo-

city of sound, by the observations on the Fort gun, is 1142 18-100ths feet per second; and by those in the Mount gun 1142 5-10ths feet; the mean of both series being 1142 34-100ths feet per secoud; so that the mean rate at which sound travels, as deduced from these observations, is, almost precisely, that which Newton and Halley have assigned.

Mr. Goldingham's observations likewise show that the velocity of sound is considerably affected by the different states of the atmosphere and of the weather, and by the wind, contrary to what has been asserted. The close agreement of the mean velocity by the Mount gun with that by the Fort gun evinces that sound does travel equably through paths of different length. The last table showed the mean velocity at Madras for each month; the velocity increases to a maximum at the middle of the year, being then 1164 feet per second: the minimum is 1099 feet.

At this meeting, a paper was also read, on the question as to the evolution of heat during the coagulation of blood, by Charles Scudamore, M.D. &c. (communicated by the president.)

A part only of this paper was read, and the remainder postponed to a future meeting.

Feb. 27.—The reading of Dr. Scudamore's paper was resumed and concluded.

In this paper, Dr. Scudamore examined the results as to this subject, which had been obtained by Mr. John Hunter, Dr. J. Davy, and the late Dr. Gordon, of Edinburgh, and expressed his belief that the experiments which he had made upon it would explain the reason of their discrepancies. He then described those experiments; in some of them the successive temperatures of the coagulating blood were compared with those of a solution of starch while cooling, and also with those of pure water under the same circumstances; and he inferred from the whole, that a slight evolution of heat does take place during the coagulation of blood. It commences when the fibrin begins to concrete, but continues throughout the coagulation; in some instances the temperature rose 1°. Some of the discordancies in the statements of former experimenters appear to have arisen from the difference in temperature of different parts of the same portion of coagulating blood.

(To be continued.)

The election for a foreign associate, in the room of the deceased Dr. Jenner, of the French Institute, took place on Monday week. The following gentlemen were proposed:—Dr. Wollaston, Dr. Young, M. Olbers, M. Sœmering, M. Von Buch, Mr. Lambton, Mr. Brown, Mr. Dalton, and M. Œsted. The number of members who voted was 44; and the ballot was as follows—Dr. Wollaston 38—Olbers 5—Von Buch 1. It is highly honourable to the English nation, that out of nine persons proposed by the Institute, almost all the learned and talented men of the civilized world, five should be Englishmen.

NEW PUBLICATIONS.

Just published, second edition with additions, SIR ASTLEY COOPER'S work on dislocations and fractures of the joints. The appendix to this valuable work, the author, with a liberality rarely equalled, has printed in a separate form, for the benefit of the purchasers of the first edition, who may be furnished with, gratuitously, on application to their respective booksellers.

There is now in the press, a Pandect of the writings and practice of a century of Surgeons, for the prevention of venereal diseases and cure of gonorrhœa, by means which all may obtain, and all may administer. *"Cito et Certe."* Also, some remarks on strictures of the urethra. By a Physician.

TO CORRESPONDENTS.

*We refer to our columns for sundry communications from various quarters.—"*PHILOMATHUS*" may see his intimation anticipated, if he will give himself the trouble to look.*

Remarks on the diseases of Upper Canada are not without interest, and would appear to better advantage in another shape, when they could not fail to be appreciated.

The WEEKLY MEDICO-CHIRURGICAL MAGAZINE *will henceforward be printed on finer paper, and published regularly early every* SATURDAY *Morning;—containing, among a variety of interesting matter, the essence of the most popular journals, and other works on surgery, medicine, chemistry, &c.—Hospital reports—with those of various learned societies, &c. &c.*

All Letters, &c. (post paid) addressed for the Editors, at the Publisher's, &c.

London:

Printed by E. JUSTINS, 41, *Brick Lane, Spitalfields.*

Published by COX and SON, St. Thomas's Street, and 39, High Street, Southwark. Sold also by Sherwood, Neely, and Jones, Paternoster Row; Simpkin and Marshall, Stationers' Court; Callow and Wilson, Princes' Street, Soho; John Cox, Berner's Street, Oxford Street; E. Wilson, Corner of Royal Exchange; W. Turner, Cheapside; T. Boys, Ludgate Hill; H. and W. Smith, 192, Strand; G. Roake, 31, Strand; Sams, St. James' Street; W. Stewart, South Bridge Street, Edinburgh; and Hodges and M'Arthur, Dublin.

THE WEEKLY

MEDICO-CHIRURGICAL & PHILOSOPHICAL MAGAZINE.

No. X.] SATURDAY, APRIL 12, 1823. [*Price* 4*d*.

"FLORIFERIS, UT APES, IN SALTIBUS OMNIA LIBANT
OMNIA NOS, ITIDEM, DEPASCIMUR AUREA DICTA."

CASES FROM THE APPENDIX TO THE SECOND EDITION OF SIR A. COOPER'S WORKS ON DISLOCATIONS AND FRACTURES, (JUST PUBLISHED.)

(Continued from page 130.)

Of Fracture of the Neck of the Thigh Bone.

I Have stated it to be a general principle, that the neck of the thigh-bone, when it is broken within the capsular ligament, and attended with the usual characters of that fracture, viz. occurring in advanced age, a limb shortened, from one inch and a half, to two inches and a half, accompanied as it usually is by an everted knee and foot, such fracture does not unite by an ossific process, but by means of a ligamentous substance passing from the capsular to the reflected ligament, and from bone to bone.

Since the publication of the first edition of this work, I have had the curiosity to ascertain the number of specimens of un-united fractures of the Cervix Femoris, contained in the different collections of the United Kingdom, and I find them to be as follows:—

In the Museum of St. Thomas's Hospital we have seven specimens, five of which are human, and two are the result of experiments on animals.

NUMBER OF SPECIMENS.

In St. Thomas's Collection..	7 specimens
In the College of Surgeons..	1 ditto
In St. Bartholomew's.....	6 ditto
At Dublin.....	12 ditto
In Mr. Langstaffe's of Basinghall Street.....	6 ditto
In Mr. Bell and Mr. Shaw's	6 ditto
In Mr. Brooke's.....	2 ditto
In Dr. Monro's.....	2 ditto
Mr. Mayo's Collection....	1 ditto
	43

The main principle upon which this want of union depends, I have endeavoured to shew, exists in the lessened nutrition of the head of the bone; from the bone, periosteum, and reflected ligament being torn through, and the ligamentum teres being the only source of supply of blood to the head of the bone which remains in the acetebulum; the arteries of the ligamentum teres are small, and do not appear to have the power of secreting ossific matter, as the head of the bone undergoes scarcely any change after the accident.

But the best proof of the difference of a fracture within, and one external to the ligament, is given in a preparation of Mr. Langstaffe's, in which a fracture has happened within the ligament, and another external to it, and whilst the latter is seen firmly united, the former has undergone no ossific change.

It is of great importance to determine if this want of union be a general rule or not. In the forty-three cases which I have given, does the non-union depend upon the structure of the parts and seat of the accident, or on the surgeon's ignorance and inattention? It is my belief, that the permanent lameness, the crepitus, the shortened state of the limbs, and its everted position, are not in the surgeon's power to prevent or controul; but still, if he has the smallest doubt, either of the nature of the accident or its result, he should employ the means which may suggest themselves to his mind as holding out the hope of a successful issue.

There is scarcely any general rule to which some exception may not be

found, and I have expressly stated in this work, that "it is possible the neck of the thigh-bone might be broken, without the strong sheath of its periosteum and reflected ligament on the neck of the bone which surround it, being torn; and that, under such circumstances, if they ever were to happen, ossific union might still proceed, but that in such a case, the usual shortening of the limb would not occur."

Mr. Stanley, assistant-surgeon of St. Bartholomew's Hospital, has kindly shown me a bone, which conveys the idea that the neck of the femur had been broken and united; but it is curious, that the other neck of the thigh-bone, in the same subject, exhibited appearances nearly similar, only external to the ligament. I have in my possession, a fracture of the neck of the bone, and of the trochanter major, in which the periosteum and reflected ligament are not torn, and in which, if the patient had lived, I see no reason why it should not have united. If upon further investigation by Mr. Stanley, it should be found that in his case, the fracture of the neck of the thigh-bone within the capsule, had united, the cases would still remain forty-three to one in favour of the general principle which I have stated. But in all cases in which a crepitus could be perceived at the joint by moving the thigh, if the leg be but little shortened, I should treat the patient as if the fracture were external to the ligament, although it be internal, as it will have the character of the external, and not that of the fracture within the ligament.

(To be continued.)

MEMOIR.

(Continued from page 131.)

Without wishing, in the smallest degree, unduly to exalt Dr. Gordon's merit, and still less to depreciate that of his contemporaries, I may venture to express my opinion, that, from particular circumstances, no individual in this country was, at the period alluded to, so well prepared as himself to estimate the real merits of Dr. Spurzheim's demonstrations. It has been already stated, that while engaged in drawing up the article on the Anatomy of the Brain for his System, he had been long and laboriously occupied in the study of all the later writers on that organ, from Vieussens and Malpighi, down to Reil and Gall; and the representations given in their works, he had sought to verify by actual examination. He was thus not only informed of what had been done by others, but of the methods they had severally employed. Parts therefore, and appearances, which seemed new to many, were quite familiar to him; and methods of preparation and dissection, commenced by Viens-sens, and carried so far by Reil, though, in general, unknown at that time in this country, and apparently to the anatomists of France, had been studied by him with the greatest care, and even successfully practised. Thus instructed, he was able at once to distinguish what was announced as new, from what was original—to separate mere appearances of structure from actual realities—to check any disposition to pass off assertion for fact—and finally to detect and expose the art and fallacy of mixing, with avowed demonstration, hypothetical notions of structure derived from the fancy alone, and which no dexterity could display and render visible to the experienced eye. The objections made at Dr. Spurzheim's second demonstration and description of the brain, Dr. Gordon subsequently extended and embodied in a work, entitled, 'Observations on the Struc-'ture of the Brain, comprising an estimate 'of the claims of Drs. Gall and Spurzheim 'to Discovery in the Anatomy of that 'Organ.' Edin. 1817. To this work is added, by way of appendix, the article 'Sur l'Anatomie du Cerveau, drawn up by M. M. Gall and Spurzheim for the Dictionnaire des Sciences Medicales. It contained, at that time, their latest views on the structure of the brain; and was referred to by Dr. Gordon as an authentic record of their opinions.

It would be quite out of place, to enter into any detailed view of all the disputed points in this controversy; a few only of the leading questions can here be briefly discussed. Drs. Gall and Spurzheim had set out with observing, that the knowledge of the anatomy of the brain had advanced but slowly, partly on account of the great delicacy of the organ, and the very defective methods of dissection hitherto employed: but, more especially, from the total want of *physiological principles* proper to conduct to a knowledge of the nervous

system in general, and of the brain in particular. They therefore claimed the merit of introducing new and more successful methods of dissection, and of being guided always by physiological views in the prosecution of their anatomical investigations. By the combined use of these means, they professed to have corrected much that was erroneous in the descriptions of their predecessors, and to have added to them much that was new. It was Dr. Gordon's object to examine, whether the methods thus announced as new, were truly original;—how far the physiological principles, thus ostentatiously proclaimed, were in themselves just:—and if any, and what were the errors which these anatomists had corrected—and what the new inventions or discoveries they had made.

With respect to alleged *novelty* in the mode of demonstration, these anatomists profess to deviate from their predecessors, by commencing their dissection at the base, and proceeding upward towards the vertex of the brain, contrary to the common practice; but, so far from this method being original, Dr. Gordon has shown, that, although of late disused, it was long since sketched by Varolius, detailed afterwards by Vieussens, described distinctly by Malpighi, and again *first* revived and followed out with the greatest minuteness by Reil, in 1795, and in his subsequent researches.

Farther, instead of cutting the parts with the scalpel, Drs. Gall and Spurzheim separate the medullary matter of the brain by *scraping*, or tearing it with the fingers, or handle of the scalpel, the better, it is said, to display its fibrous structure. This operation was also assumed as new; but Dr. Gordon has shown it to have been practised more than a century ago by Vieussens, to have been adopted by Morgagni, and subsequently employed both by Mayer and Reil. Hence, therefore, it is quite evident that, neither in the mode of demonstration, nor in the manipulations made use of, can these anatomists lay claim to priority of invention: and even the smaller merit of *reviving* these methods belongs not to them, but to their laborious, modest, and candid countryman Reil. The first results on the anatomy of the brain, in which the methods and manipulations above-mentioned were extensively employed by Reil, were published in Gren's Journal for 1795, thirteen years, says Dr. Gordon, before Gall and Spurzheim presented their Memoir (which is their first composition) to the French Institute.

(To be continued.)

PHRENOLOGICAL OBSERVATIONS.

Observations on Phrenology, as affording a systematic View of Human Nature.

(Continued from page 132.)

Now metaphysical philosophers, in investigating the phenomena of mind, have depended chiefly on the aid of consciousness for revealing the laws by which they are regulated, without attending to the effects of the organization. In doing so they appear to have taken too limited a view of the subject. The gradual and successive expansion of the infant faculties, keeping pace with the progressive perfection of the brain; the existence of idiotcy, and of insanity, and the every day phenomena of disease causing changes in the state of the mind, prove the constant and unceasing influence of the organic medium on the mental manifestations. The neglect of the influence of the organization appears therefore to have been one great cause of the constant failures which have hitherto occurred to metaphysicians in forming theories of the mind. Every mental act is performed by means of, and is influenced by, the organic medium, and yet, when in health, consciousness does not reveal to us even its existence. Its insufficiency, therefore, for unfolding the whole truth regarding the mind is obvious, and in consequence it is clearly an inadequate basis, on which to erect a complete system of mental philosophy. This conclusion appears the more sound, when we recollect that consciousness has never conducted two philosophers to precisely the same result; and that it varies in the same individual according to the state of his health, age, and other circumstances. By its aid we can discover only the successive conditions of our own mind upon the presentation of certain impressions, but because certain ideas or emotions arise or succeed each other in a certain order in one mind, and at a certain time, can we affirm, that such is

the order in the minds of all men, at all times? Certainly not; for the first person we meet with has a mind differently constituted from our own, and he denies the accuracy of our observations. So that by this means alone we can never discover the nature and number of the mental faculties, or the existence of the organ by which they act.

Physiologists being fully convinced that the functions cannot be discovered by dissection, have next supposed that by careful observation of the effects of injuries of this organ, we shall be able to ascertain the functions of its different parts; but we suspect that this method also is as inefficient as the others. Sir Everard Home, with the laudable view of throwing light upon a difficult subject, made a collection of upwards of fifty cases of cerebral injury, and noted carefully the effects produced, but these effects were all general, as coma, delirium, sickness, vomiting, and the like, without any constant or particular modification of one or several mental faculties ensuing from each particular lesion suffered by the brain. Such are the modes of enquiry hitherto in use.

In opposition to them, the phrenologists recommend the method of comparing the developement of the head with the manifestations of particular faculties of the mind, in a state of health, and affirm that in cases where an individual propensity, sentiment, or intellectual power, is extremely vigorous, a certain part of the brain will be found very largely developed, while in other cases, where the same faculty is remarkably feeble, the same part will be found exceedingly small. The only rational objection which can be stated to this method, is, that the skull does not indicate the size of the brain. The phrenologists reply to this objection that, admitting a certain degree of inequality or want of parallelism between the inner and outer tables to exist, it is so small (not exceeding the eighth part of an inch in the general case) as not to affect the result; because a large organ of cautiousness, or ideality, or love of approbation, for instance, will cause the skull to protrude a full inch more than a small organ will do, so that the inequality of one-eighth of an inch, even if it exists, is lost in the extent of the general difference. This also is a tangible statement; and if it be true, that persons of a very cautious character have an inch more of brain in a particular quarter than those who are very incautious, the fact is worth the knowing. Being solemnly asserted as a truth by persons of intelligence and reputation, it is the summit of absurdity to laugh at their assertion, but at the same time not dare to contradict it from observation. On the whole, therefore, we conclude that the common methods of investigating the connexion betwixt the mind and the brain, are not adequate to attain the ends in view, and that there is nothing in the phrenological mode of observation which ought to prevent us from putting it in practice.

In the next place, we may compare the alleged results of the phrenological method of enquiry with several well ascertained natural phenomena, and mark the coincidence or opposition between them.

The phrenologists affirm, that a plurality of faculties and organs exist, and that one of them may be diseased, deficient, or more than usually vigorous, without affecting the state of the others, just as the organ of vision, of taste, or of touch, may be defective in one individual, while that of hearing, or of smell, remains in its usual state. The doctrine which stands opposed to this is, that the whole brain constitutes but one organ, and that every part of it is employed in every mental act. Now let us apply the two theories to several well ascertained physiological and pathological phenomena, and mark which of them

quadrates most exactly with positive experience. The following facts are too well ascertained to admit of dispute. We find some individuals, who, from birth, are deficient in some one or more of the internal faculties of the mind, as in the case of partial idiots.

(To be continued.)

PROCEEDINGS OF PHILOSOPHICAL SOCIETIES.

ROYAL SOCIETY.

(Continued from page 144.)

The following paper was also read at this meeting:—On the Double Organs of Generation in the Lamprey, Conger Eel, Common Eel, and Barnacle, which impregnate themselves, and in the Earth Worms, the individuals of which class mutually impregnate each other. By Sir Everard Home, Bart. VPRS.

A series of microscopical drawings by Messrs. Bauer and Clift illustrated the details in this paper.

March 6.—On a new phenomenon of Electromagnetism, by Sir H. Davy, Bart. PRS.—The experiment described in this paper had been first made by the author about fifteen months ago; but had been repeated by him, very recently, through the kindness of Mr. Pepys, with a battery consisting of two plates, each containing 100 square feet, which had been constructed, under the direction of that gentleman, for the London Institution; and of which, Sir Humphry hoped, Mr. Pepys would communicate a description to the Society. The experiment, however, might be made with a pair of plates each containing three or four square feet only.

March 13.—On Fluid Chlorine, by M. Faraday, Esq. (Communicated by the President.)—Previous to the year 1810, it had been supposed that the crystals which form in aqueous solutions of chlorine at temperatures below 40° were pure chlorine, but Sir H. Davy then showed that they were an hydrate of that substance. During the late cold weather, Mr. Faraday had made some experiments on this hydrate, and an analysis of it, an account of which will be found in the 15th volume of the Journal of Science; it consists of 27·7 chlorine and 72·3 water, or nearly, of one proportion of the former to ten of the latter. The President of the Royal Society suggested, that interesting results might be obtained by examining the decomposition of this compound under pressure, and requested the author to make some experiments on the subject.

Some of the crystals, dried as much as possible by being pressed in bibulous paper, were introduced into a closed glass tube, the open extremity of which was then hermetically sealed. When this tube was immersed in water at the temperature of 60°, no alteration took place in the crystals; but when it was placed in water at 100°, they were decomposed, and two fluids resulted; one of a pale yellow colour, and apparently water; the other of a deeper greenish yellow, resembling chloride of azote. This did not mix with the water, but when the tube was cooled to 70°, they again crystallized in union. Above the fluids there was an atmosphere of chlorine, the intensity of the colour of which indicated that it was of great density. Upon dividing the tube, a report took place, as of an explosion, the yellow fluid instantly disappeared, and a strong atmosphere of chlorine was produced. The author at first conceived that the yellow fluid might be a new hydrate of chlorine; but he found that it was also produced by introducing a portion of the gas, dried over sulphuric acid, into a glass tube to which a stop-cock was attached, and then forcing in air by means of a condensing syringe, at the same time applying cold; so that in reality it was *fluid chlorine*.

This fluid may be distilled out of the water by means of a spirit-lamp; at whatever temperature it is produced, it is perfectly limpid and fluid, and it remains so at 0°; it is very volatile; and when exposed at the common pressure of the atmosphere, a portion volatilizes, the remainder being cooled down so low by the evaporation, as to preserve, for a time, its fluidity. By comparing the weights of apparently equal volumes of water and chlorine, the specific gravity of the latter seemed to be 1·33: and that this estimate cannot be far from the truth, the manner in which the chlorine lies in the water is evinced by.

A note had been annexed to this paper by Sir H. Davy, in which he stated, that Mr. Faraday's experiments had induced him to think, that other gases besides chlorine might be reduced to a liquid state by the pressure of their own atmospheres, when evolving from substances containing them; and that, in order to verify this conjecture, he placed sulphuric acid and muriate of ammonia in different parts of a glass tube, and, after sealing the tube, brought them into contact; when an orange-coloured fluid was produced, which was muriatic acid. Although the two sub-

stances employed were as pure as they could be obtained, yet the orange colour of the resulting liquid, he considered, might be owing to iron. Sir Humphry concluded with some remarks upon the superiority which this method of condensing the gases possess over those of mechanical compression and the application of cold.

(To be continued.)

MEDICAL SOCIETY OF LONDON.

The anniversary of this Society was held on the 8th of March, when the following officers and council were chosen for the ensuing year:—

President, Dr. Shearman.—Vice-Presidents, Dr. Clutterbuck, Dr. J. G. Smith, Mr. Andree, Mr. Callaway.—Treasurer, Mr. Andree.—Librarian, Dr. Hancock.—Secretaries, Mr. Pettigrew, Mr. Callaway.—Secretary for Foreign Correspondence, Dr. Henry Blegborough.—Council, Drs. Walchman, Uwins, Blegborough, Copland, Blicke, Stewart, Harrison, Martin, Merriman, Hopkinson, and James Johnson; Messrs. Winder, Rees, Sutliffe, Drysdale, Box, Johnson, Dunlap, Kingdon, Ward, Taylor, Brown, Clarke, Lake, Ashwell, Wray, Skair, Powell, Egerton, Lloyd, Forster, Handy, E. Leese, Ware, and Edwards. — To deliver the Oration in March, 1824, Dr. John Gordon Smith.—Registrar, Mr. James Field.

After the announcement of the election, the president stated, that one dissertation only on the subject "dropsy," proposed by the society for the Fothergillian Medal, to have been adjudged in March, 1823, having been presented, the society thinking it probable that from the recent establishment of the prize it had not been sufficiently made known to the medical faculty, have deferred the adjudication of the prize for the best dissertation on the subject of "dropsy" to another year. He farther stated, that the silver medal offered by the society for the "best essay or essays, read before the society during the year, written by a fellow," had been adjudged to Dr. Clutterbuck, for several valuable papers presented to the society during the year.

Case of Tumour of the Abdomen from Chronic Inflammation of the Peritoneum.—By RICHARD WARD, ESQ. *Member of the Royal College of Surgeons, &c.*

Michael Slater, ætat. thirty-one, was admitted into St. Giles's Parochial Infirmary, October 22, 1822, having a tumour of considerable magnitude situated on the right side of the abdomen, attended with frequent pain and vomiting, extreme emaciation, and hectic symptoms. He stated that he had been ill five months; that his first symptoms were, occasional pain about the navel—which he considered of a colicky nature—vomiting, and dark-coloured evacuations, the latter of which he described as resembling ink; and that about a month after these symptoms had come on, he discovered a small tumour on the right side of the abdomen, which, with his other symptoms, had continued gradually to increase. The tumour, from the time of his admission, became progressively larger, and eventually occupied nearly the whole of the umbilical, right and left iliac, and hypogastric regions, was extremely hard and somewhat irregular, but gave no particular pain on pressure. His situation was rendered much more comfortable, and his most urgent symptoms were relieved, by leeches, fomentations, opium and effervescing saline mixture. His strength, however, continued rapidly to decline, and his emaciation became more extreme. About three weeks previons to his death a distressing diarrhœa came on; his evacuations, which had hitherto been scanty, and not procured without the aid of medicine, now became copious, of a light colour, purulent, and very offensive. He died December 13th.

Dissection.—The peritoneum lining the abdominal muscles was found remarkably thickened (the thickening varying from one and a half to two inches) by a substance somewhat resembling fat, but more firm. On exposing the intestines, an appearance presented itself which at first seemed difficult to unravel: on more minute examination, however, it was evident that the tumour was formed by the same thickening or organized disposition already described, and which extended more or less over the *whole surface* of the peritoneum. The parts

more immediately forming the tumour were the lower portion of the ileum and ascending colon, which, having become agglutinated by coagulated lymph, formed an immense and compact mass. On the anterior part of this tumour was an opening formed by ulceration, through which a large quantity of matter had escaped into the cavity of the abdomen, which, in all probability, was the immediate cause of death. On following the course of the outer opening, a cavity was laid open, occupying its central part, and extending about eight inches from side to side, through which all excremental matter must have passed for some time previous to death, the structure of the intestines being at this part totally destroyed by ulceration; consequently, there were four openings communicating with the cavity formed by the ascending colon on one side, and the inferior part of the ileum on the other. The intestines through the greater part of their course were considerably constricted. The ureter and pelvis of the right kidney were greatly distended with urine. The lungs were free from tubercles, and appeared perfectly healthy. The remaining viscera were natural.

This case, in the earlier stages of its progress, was expected to prove of an aneurismal nature. The patient was previously healthy, and accustomed to a laborious employment; and the occasional pain and vomiting seemed rather the effect of irritation and pressure on the surrounding viscera, than the consequence of peritoneal inflammation. But the diffused and irregular appearance of the tumour as the disease advanced, the absence of pulsation, the emaciated state of the patient, and, lastly, the purulent appearance of the evacuations, obviously proved the disease to be of a different character: its true nature, however, was satisfactorily demonstrated by the dissection.

(The London Medical Repository.)

Case of Strangulated Hernia, followed by Dysentery, &c.—By J. M. Robinson, Esq. *Surgeon, &c.*

John Perkins, sixty-four years old, an abstemious liver, and of thin, spare habit, had been the subject of scrotal hernia for four years. On the morning of the 30th December, an additional portion of intestine descended, as he proceeded to his work. It became very painful towards noon. When I saw him (about five o'clock in the evening) the scrotum was distended to about the size of an inflated calf's bladder. It was apparently very much inflamed. I immediately employed the taxis, and continued it for the space of half an hour. Finding that I could not reduce it, I recommended him to go into Guy's Hospital, where he was immersed in the warm bath, bled, and two kettlesful of ice water were poured upon the tumour, Mr. Key (Assistant-Surgeon to Guy's and Demonstrator of Anatomy at the Theatre, St. Thomas's) at the same time employing the taxis. These means proving unsuccessful, Sir A. Cooper was requested to see him. His attempts to reduce the intestine being ineffectual, he ordered a tobacco enema to be administered; this was immediately done, and repeated after two or three hours. He passed some fæces after each enema. All the above means proving ineffectual, the operation was recommended; but he steadily refused to submit to it, and left the hospital on the following morning. I was again requested to visit him at his own abode. I directed the tumour and abdomen to be fomented with a decoct. of flor. anthem. cum cap. papav., and nothing to be taken but small quantities of beef tea or mutton broth. In the afternoon Mr. Key was so obliging as to visit him with me. Eight leeches were applied to the tumour, and a pint of tepid water, with a little broth, thrown up the rectum every two or three hours. His pulse was then 90, and slightly intermittent.

The leech bites had bled profusely, and the tumour had diminished in size and become softer. The fotus and enema were continued.

Jan. 1.—The tumour was the same as last night. Pulse 86, more regular and firm. Tongue moist, but furred. He had an increase of sickness, with tension and pain in the abdomen, particularly in the course of the ascending colon. Fotus, enema, &c. were continued.

2d.—Tension and pain were increased. Hæmorrhoids, with which he had been frequently troubled, had now attained so large a size, that the pipe could not be introduced to continue the fotus, &c.

3d.—He has passed a very restless night; there was a peculiar, anxious, desponding cast in his countenance, indicative of an increase of pain. The pulse, sickness, thirst, tension, and appearance of the tongue, were as before. When employing the taxis this morning, I was pleasantly surprised to find that a portion of the intestine returned, preceded by a gurgling noise, and the tumour was diminished one-half its former size. I was induced from this to continue my attempts much longer than formerly, in the hopes of completely reducing it; but I was unable to effect my purpose. I then ordered the fotus to be repeated every two hours, and such a position to be observed as would relax the abdominal muscles, also a gentle pressure to be kept upon the tumour with his hand. About noon he sent to say that it was still less than when I left him in the morning: on visiting him I found it scarcely one-third its previous bulk, but still I could not completely reduce it. (*Evening.*)—His thirst was very great, he drank freely of cold water, which was immediately rejected. Pulse 80. He repeatedly passed flatus per anum. Fotus, beef tea, &c. were continued.

4th.—He had a bad night, and his former anxious looks again became depicted on his countenance. Pulse 68, smaller, and rather intermitting. Thirst increased; sickness and appearance of the tongue as yesterday; the tension of abdomen was increased. The operation was again mentioned; but he steadily refused the adoption of this measure.

5th.—He passed a still more restless night than before. Pulse 92, and intermitting; he perspired profusely; tongue as before; thirst, sickness, pain, and tension, were very evidently increased; the tumour remained stationary. Fotus and regimen were continued.

6th.—He had no sleep. The anxiety before marked in his countenance was still greater; pulse 96, and gradually sinking; the pain and tension increased rapidly through the day. He would have consented to have the operation performed to-day, but the opposition of his wife and attendants shook his resolution.

7th.—This morning Mr. Fagg accompanied me to see him. We found the same symptoms as yesterday. Our united efforts in persuasion obtained a partial consent to have the operation performed, and we left him with a promise that Mr. Key should call upon him. Accordingly, this gentleman accompanied us in the afternoon, with the intention of operating; but we found him much worse than in the morning, and apparently sinking very rapidly. He now felt himself so much weaker, and so much more depressed, than at our morning visit, that he again positively refused to have the operation performed. Indeed, Mr. Key did not press the performance of it, for the pulse sank so much, during the time we were in the room, that he was fearful the man might die upon the table: he, therefore, recommended that the fotus should be continued, with the beef tea, &c. This evening he rallied a little: the pulse was 92, and more regular.

8th.—He passed a very restless night. Pulse 96. Thirst was very

great. Sickness and pain were less severe; but the abdomen was enormously distended. He had, for three or four days, frequently expelled flatus per anum. This evening he had precisely the same symptoms as in the morning. I made an attempt, as usual, to reduce the intestine. In a few minutes I was agreeably surprised to find that a portion of gut went up, preceded by a gurgling noise; and by persevering, I effected a complete reduction within half an hour from my entering the room. He felt immediate relief. Shortly after, Mr. Key came in, and a little water being given to him, we staid a considerable time to see if the stomach would reject it: it did not (this fluid had always before been rejected immediately), Mr. Key prescribed the following aperient:— R. Magnes. Sulph. ʒj. Magnes. Carb. gr. j. M. ft. Pulv. 3tiâ quâque horâ sumend. in Oss. Aquæ tepidæ.

(Concluded in our next.)

PHYSIOLOGICAL OBSERVATIONS

Case of Hydatids found in the Pulmonary Veins; read at the Académie Royal de Médecine.—By M. ANDRAL, Jun, M. D.

On opening a subject, lately, at *La Charité*, I found both lungs filled with a great number of hydatids. I was at first of opinion that these *entozoaires* were lodged in the parenchyma of the lungs; but a short time afterwards I examined the preparation, conjointly with M. Breschet, when a more attentive dissection discovered to us a fact, of which, I believe, there are but few analogous cases in the annals of science, viz. the existence of hydatids in the pulmonary viens. Several of these hydatids were lodged in sacs with a smooth surface, which appeared at first to be so many cysts. Others, empty and rolled several times upon each other, were contained in narrow canals, which ramified like vessels, and the lengthened form of which they had assumed. The internal surface of these canals was smooth like that of the great sacs. We soon discovered that in each sac a vessel of a small calibre terminated: this, in order to form it, underwent a more or less considerable dilatation. We then dissected the pulmonary veins at their origin; and when we had almost arrived at their capillary divisions, we begun to witness several of them present a number of dilatations *(renflemens)* filled with hydatids. After being thus dilated, the vein resumed its primitive calibre, but a little farther on became again dilated. The most considerable sacs would have admitted a large nut, and the smallest could have scarcely contained a pea. They existed equally in both lungs. The hydatids which they contained had all the characters of *acephalocystes*; in several there were small points of a faded white colour; others presented on their internal surface a great number of miliary granulations. The majority were broken. Around them the pulmonary tissue was in some places sound and crepitating; in others, strongly obstructed and *hepatized*.

A large hydatiferous cyst, with cartilaginous parietes, and capable of admitting a large orange into its interior, existed in the middle of the liver; it contained from eight to ten hydatids. The right cavities of the heart were considerably dilated, and the parietes of the right ventricle a little thickened. The individual who was the subject of this case was a man about fifty-five years of age, who for a year previously had been ill-fed, and often experienced considerable distress. I mention these facts, because in accounting for the presence of these animals in man, it may be considered that the regimen and manner of living, exercise some influence on their developement. During the stay of the patient in the *Hôpital de la Charité*, nothing but the ordinary symptoms of an affection of the heart were manifested. Pulsations distinguishable by the noise, but without impulsion, over the whole extent of

the sternum and under both clavicles; pulse ordinary; face turgid and livid; anasarca of the limbs; constant state of orthopnœa: a crepitating rattling, audible in several parts; in others complete absence of respiration. The difficulty in respiration became greater and greater, until the period of his death. It is not unreasonable to suppose that the presence of so great a number of hydatids in the pulmonary veins impeded the circulation, and contributed to the developement of the aneurism of the heart.—*Jour. Physiolog.*

M. Itard *on the Transmission of Sound by the Eustachian Tube.*

M. Itard controverts the received opinion, that sound is partly conveyed to the ear through the inner opening of the Eustachian tube. The experiment upon which the common opinion is founded is, that when a watch or other sounding body is made to touch the teeth, it is heard more distinctly. It is unfortunate, M. Itard thinks, for this theory, that by putting the watch back on the tongue, without touching the teeth, and at the same time, shutting the mouth, the sound cannot be heard at all, though the watch is much nearer the Eustachian tube. We have tried this, and find that M. Itard is correct. But why then, it will be said, do people open their mouths, when listening attentively? Perhaps to allow the sound to strike on the teeth which are good conductors.—*(Itard, Maladies de l'Oreille.)*

Professor Silliman *on the Effects of Nitrous Oxide on the Organs of Taste.*

The singular intoxicating effects of nitrous oxide, are well known to have caused some of those who first breathed the gas, to say they felt as if "bathed in delight." A man of mature age, grave character, infirm, and in low, gloomy, and depressed spirits, inhaled about three quarts of it, at Yale College. As was to have been expected, he felt great exhiliration, which continued unabated for thirty hours, and more or less for a whole week. What was remarkable and peculiar, was, that he could only relish things which were *sweet*, and for several days ate nothing but sweet cake. Afterwards, he used sugar and molasses, both on his bread, and on his meat and vegetables. His strength was greatly restored, and his mind was relieved from gloom and depression.—*(Silliman's Journal, Vol. V.)*

Case of Croup.—*By* H. S. Belcombe, M. D.

Dec. 5, 1822. Three o'Clock, P.M. —Master C——, a fine healthy boy, ten years old, was suddenly seized, after eating a hearty dinner, with cough, difficulty of breathing, and sense of suffocation. I had the good fortune to see him in less than an hour from the commencement of the attack, and found him labouring under all the symptoms of croup; the brazen cough seemed more particularly marked than I ever recollect to have heard. Three grains of tartarized antimony, dissolved in two ounces of water, given in the course of twenty minutes, having procured copious vomiting, fourteen leeches were applied to the throat, and the bleeding well promoted by warm poultices. In five hours there was no remission of the symptoms: my friend, Mr. Wood, who met me in consultation, opened a vein, and abstracted ten ounces of blood, dark and thick, (but which threw up no inflammatory crust on cooling,) this seemed to alleviate his misery: and three grains of calomel were ordered every two hours through the night, with a blister to the sternum. In the morning we found he had passed a tranquil night. The cough was yet hard, with sense of constriction about the glottis; the pulse short and hurried, but much less so than in the evening. Fourteen leeches were again applied to the

throat; an aperient draught ordered, and the calomel ordered as before. On the morning of the seventh, the inflammatory symptoms had yielded, and the calomel was in consequence discontinued. A cough still remained, but it was loose, and unattended with pain. Some bilious fœtid motions had passed, but the boiled-spinage appearance was totally wanting. The boy is becoming convalescent, but does not appear to suffer any inconvenience from the quantity of calomel exhibited. I have no doubt that, in this case, the bleeding and calomel arrested the inflammatory symptoms, and probably saved the boy's life; and it may seem a gratuitous observation to say, I would recommend the same practice in all possible cases, &c.—*Med. Phys. Journal.*

Newcastle, Staffordshire, Dec. 10, 1822.

Dr. Mott's *Case of Ligature of the Arteria Innominata.*

We are indebted to the German Journals for an account of this interesting case, not having yet received any of the American publications in which it is detailed.—Michael Bateman, a sailor, aged fifty-seven, a native of Salem, in Massachusetts, was admitted into the New York hospital, with a catarrhal fever, and a swelling of the left arm and shoulder. These affections partly yielded to treatment, when he fell by accident upon his arm and shoulder, in consequence of which a violent pain and swelling in his right shoulder followed, and soon after a slight pulsation was detected under the clavicle. On the 3d of May, he felt a pain as if something had rent, and the tumefaction immediately increased to a great size, and the pulsations became more distinct, particularly on the inferior side of the clavicle. He became very feeble, and had a violent cough. On the 7th of May, Dr. Mott called in Doctors Post, Kissam, and Stevens, and it was agreed to tie the subclavian artery, and if it was found affected, to put a ligature on the common trunk. On the 11th, the operation was proceeded with, the patient having previously had seventy drops of Tinct. Opii. Two incisions were made, one in the direction of the clavicle, and the other along the sterno-cleido-mastoideus. The carotid was laid bare, and traced towards the subclavian, which was found so diseased, that they had no alternative but to tie the innominata. They accordingly carried the incisions deeper, and separating the recurrent and the phrenic nerves, they came to the division, and passed the ligature with a curved needle, about half an inch higher. The parts were then brought together by suture, and the wound bandaged. There were only three arteries divided—a branch of the internal mammary, and two branches severally from the inferior and superior thyroid. He lost only about three ounces of blood. The whole operation was about an hour.

The patient immediately after felt quite well—pulse 69—temperature of the arm nearly the same as the other—respiration unchanged. From this period, to the twenty-second day after the operation, he continued to improve, the suppuration went on well, the ligatures came away without accident, and the pulse, which had at one time risen to 120, was reduced by venesection to its natural standard, the cough was disappearing, cicatrization was going on properly, and the swelling becoming gradually less. He was in high spirits, and was so far recovered, that he walked daily in the garden of the hospital. All on a sudden, however, on the 24th day, a hemorrhage from the wound took place, and though it was soon got under, and there was little loss of blood, it recurred twice in the next two days, respiration became painful, and the patient died on the 26th day.

Eighteen hours after death, the wound was black and fœtid. There was no trace of inflammation in the arch of the aorta, the origin of the

arteria innominata, or in the lungs. The internal membrane of the innominata was smooth and soft, and its parietes were so thick, that there was only room for a crow quill to pass. The subclavian artery opened into the tumour; the carotid was filled with coagulated blood. The arteries of the arm were healthy. The clavicle was carious, and almost separated in the middle. The death was evidently caused by extensive suppuration.

(Langenbeck's Neue Bibliothek.)

Dr. WALTHER's *Singular Case of a Foreign Body, which remained seven years in the Trachea.*

In 1821, a young man, aged 17, applied to Dr. Walther, affected with phthisis, from the claw of a craw fish which he had swallowed in 1811, and which had got into the trachea, and remained in the right bronchia, occasioning violent convulsions, coughing, and hæmoptysis. Oil of sweet almonds, followed by opiates, purgatives, assafœtida, and corrosive sublimate eased the cough, and he thought, as he became easier, that the claw must have been removed. There remained however phthisis, which was followed by cramps, which did not yield to bathing. Up to 1814 he expectorated pus, and had repeated feverish attacks in spite of pitch, vapour baths, and Dover's powder. He had subsequently a brain fever, strong convulsions, chorea, strabismus, and somnambulism. Sometime after, he was seized with an irresistible desire to bite, and when he could find nothing else he bit his own hands. He afterwards had distressing optical illusions, and could not look on any thing black without screaming. He lost the sense of taste, and it was painful for him to utter a sentence. His limbs were then paralysed, and he took a great passion for cutting and piercing instruments, and when alone he cut and stabbed himself. Sometimes he sought to strangle himself; but after the excess of the furious fit was over he complained of great fatigue and of uncommon pains. For two years he amused himself like an infant, during all which time the cough and expectoration continued. After a time his paralysis was partly removed again, and he began to walk and to try medicines, all of which he had given up. Every thing was tried, blisters, anthelmintics, camphor, musk, bark, calomel, aloes, hellebore, laurel water, iron, zinc, &c. and all without success. In 1815, his nervous symptoms returned during winter, and disappeared again without medicine in spring. In autumn they again returned more violently than ever, and his expectoration contracted a very remarkable fœtor. He bruised every thing he could come at, and had a strong propensity to leap out of the window, which he once accomplished from the first floor. His appetite was gone and his bowels torpid. In January, 1816, he lost his voice, his sight, and his hearing; but these he recovered in the succeeding summer; and the year following, the same circumstance occurred. In 1818 he lost his appetite, and could only take bread, honey, and coffee. Medicines were again tried with no avail.

On the 27th of April, 1818, after a violent coughing for several days, he brought up the claw of the craw fish with a great quantity of pus, and this put him in great hopes of a cure. In 1819 he had a quotidian fever, which was subdued by bark, myrrh, and acetate of lead. In 1820 he took no medicine. During the winter of 1821 he complained of pains in his side, and spit up blood. He tried the vapour of tar and sulphur; the expectoration ceased, he recovered his health, and can now attend to his business. — *(Grafe and Walther's Journ. der Chir. und Augenheil.)*

Revival of the Humoral Pathology in America.

Systems of medicines are notoriously under the influence of vicissi-

tude. The leading doctrines of the present day, are in most cases directly opposed to those which referred all diseases to the state of the fluids. This old and obsolete pathology has, however, it seems, been revived and defended with great boldness and spirit, by Professor Hosack, in the Medical School of New York. The positions defended are—1. "That most, if not all diseases, arise primarily in the fluids. The Solidists of Philadelphia reply, that all the fluids are derived from the solids, and ask whether it is the blood, or the integuments and blood-vessels, which are first affected in vaccinating?—2. "That the blood is often marked by a morbific lentor or viscidity." It is replied, that this is never the case till the blood be extravasated, and begin to decompose; and in phthisis, rheumatism, and inflammatory fevers, it is perceptibly thinner than in health." —3. "That the blood sometimes receives sundry kinds of morbific acrimony from without." It is replied, that even the matter of small-pox or syphilis only irritates the solids; such as the punctured integuments, or the lymphatic glands, which by sympathy re-produce the disease in distant parts. In the case of turpentine, garlic, &c. being smelt in the urine, and in the milk, while no such odour is perceptible in the blood, nor in the chyle, it is conjectured, that the odoriferous matter may be re-produced by sympathy, in the same manner.--4."That the blood sometimes contains a putrid acrimony engendered within." It is replied, that the vital principle is so powerfully antiseptic, that it would immediately correct such a putridity, or the animal would die.—5. "That the blood is the medium in which contagion is generated, multiplified, and diffused through the system." It is replied from experiment, that blood taken from patients in small-pox, cow-pox, measles, or lues, will not infect by inoculation. The contagious matter of plague, &c. is increased by secretion, while the blood remains healthy, like the poison of the rattle-snake, whose blood is not poisonous; or of the cherry-laurel, whose sap-juice is not more poisonous than that of the birch, or sugar-maple. —We think, that if our American brethren would observe more, and write less, they would improve faster. The straining after fine sentences, and the gasconade of metaphor in this controversy, is quite juvenile, mawkish, and offensive.

(Chapman's Journal.)

Case of Trepan, by M. Dupuytren, *of the Hotel Dieu.*

On the 1st of February last, M. Dupuytren performed the operation of trepan upon a patient in the Hotel Dieu at Paris, under very peculiar circumstances. The patient, a young man, had two years before received a stroke with a pointed knife, over the upper and back part of the right parietal bone. For this wound he was admitted into the Hotel Dieu: it soon healed; the patient for a long time after experienced no bad symptoms, when at length a tumour appeared upon the spot where the blow had been inflicted. This tumour suppurated and burst, and a piece of the point of the knife, an inch and a half in length, was discharged through the wound, two months and a half before the date of the operation. M. Dupuytren was of opinion, that the knife must have penetrated through the bone into the substance of the brain. The discharge of pus soon ceased; the opening closed entirely; but the patient began to complain of pain in the head, to experience from time to time rigors, and irregular feverish fits; for which leeches behind the ears, laxatives, pediluvia, &c. were prescribed. These symptoms continued to increase in severity; the patient was struck with total palsy of the left side, and with occasional convulsion of the muscles of the right; in fine, he lost the powers of

speech, sensation and intelligence, and lay in a state of profound stupor, with slow stertorous breathing, and with a slow, and what M. Dupuytren considered a feeble pulse. Taking all the circumstances into account, there could be no doubt that the symptoms depended upon compression of the brain; and as M. Dupuytren believed, from a collection of pus between the dura mater and the cranium. The trephine, with the expectation of finding matter here, was accordingly applied in the situation of the wound, and a circular portion of bone removed; and the surprise of the surgeon may be conceived, when the dura mater was considered to be quite healthy. Observing, however, that it projected into the wound, M. Dupuytren cut through the dura mater, but he observed nothing unnatural in the state of the brain below. A bistoury was then plunged to the depth of more than an inch into the substance of the brain itself, and by this opening, an ounce and a half of pus was discharged. The patient, who had not complained during the incisions of the scalp, now complained loudly of pain in the wounded parts; he spoke distinctly, and answered with accuracy the questions put to him, and the paralysis was so much relieved, that he moved his limbs at will, and stretched out the paralytic arm to M. Dupuytren, when he was leaving him.—For more than forty-eight hours after the operation, the patient continued to do well; no symptoms appearing, either of inflammation or compression of the brain. All of a sudden, however, he fell into violent convulsions, which ended in death, in about two hours. The brain was inspected the second day after, and no marks of inflammation of the membranes, or of the brain itself, were discovered. There was a small quantity of pus in the cavity of the abscesses, but not enough to produce any degree of compression.—*Paris, 16th Feb.* 1823.

Quart. Journ. of For. Med. Sur. &c.

M. Dupuytren's *rare Case of Luxation of the Metatarsus.*

It has been denied, that from the structure of the parts, a luxation could take place of the whole metatarsus upon the tarsus; and the arguments have been supported, at least negatively, by there being no case on record. M. Dupuytren has set the question at rest, by exhibiting an instance of this luxation to the Royal Academy, which occurred to a woman.—*(Sceance Acad. Roy. Med. Paris.)*

MELANGE.

Account of a new Mineral, named Chloropal.

Prof. Bernhardi, of Erfurt, and Dr. Rudolph Brandes, have given the description and analysis of a new mineral, which they call Chloropal, and of which they distinguish two varieties, the conchoidal and the earthy.

It occurs not far from Unghwar, in the Comitate of the same name, and had received the trivial name of green iron earth. The conchoidal variety is pistachio-green, the powder yellowish-white; it is scarcely translucid on the edges, fracture conchoidal, hardness between fluor and calcareous spar, fragile; its specific gravity, according to the mean result of different experiments, approaches very nearly to 2,000. The parallelopiped fragments, into which it is apt to break have on the face which, in their natural place, has been turned upwards, a positive magnetic pole; on its lower face a negative. Four other poles occur on the lateral edges, of which two adjoining are positive, and two opposite negative. The mineral has, therefore, three magnetical axes, which pass each other at right angles, and agrees in that respect with opal; but is quite different from quartz and other similar minerals: it does not phosphoresce.

The earthy variety has the same magnetic properties as the former; its fracture is earthy; its specific gravity

1,870; that of another piece 1,727. Both occur with opal.

The composition of the conchoidal chloropal is:

Silica	46·0
Oxide of iron	35·3
Magnesia	2·0
Alumina	1·0
Potash and manganese	Traces
Water	1·80
	100·0

The earthy chloropal contains:

Silica	45·0
Oxide of iron	32·0
Magnesia	2·0
Alumina	0·75
Potash and manganese	Traces
Water	20·0
	99·75

Experiments were made to discover fluoric acid, sulphuric acid, lime, and potash, but none was found.

HOSPITAL REPORTS.

ST. GEORGE'S.

Particulars of a case of extra-uterine Gestration.

Elizabeth Atterwell, a married woman, aged 28, was admitted into this Hospital on the 5th of March last; she had been delivered of her first child in the year 1815, four years after marriage. The birth of this child took place some weeks earlier than was expected, in consequence of a fright. Six years after this she again suspected herself of being pregnant: she quickened at about five months; but at the end of the seventh month her menses re-appeared, after which she did not again feel the child. At the full period of nine months, labour pains came on, and continued for four days, when they ceased. From that time there was no alteration in the size of the abdomen, and she experienced no other inconvenience than that which arose from the weight of the tumour. At the natural period after the cessation of the labour pains, her menses returned, and have continued regularly, with a trifling exception. Suppuration lately took place in the tumour, a little below the umbilicus, and the discharge has become more offensive within these three weeks. The tumour, which at first lay more towards the left side of the abdomen gradually extended towards the right, accompanied by a sense of throbbing; and the pain has principally been referred to that side. On examination with a probe, bone was readily felt, and the cavity presented to the touch a great irregularity of depth. On the 12th of this month (March) Mr. Gunning introduced a probe pointed bistoury into the opening of this tumour, and cautiously enlarged it upwards towards the umbilicus: he then introduced his finger, and without difficulty removed two bones, which, on examination proved to be two of the vertebræ. A larger portion of bone next presented itself; but it was not loose, and the attempt to move it causing considerable pain, it was judged proper to wait until it should become loosened; the wound being kept dilated by means of the sponge tent.

To the Editor of the Medico-Chirurgical Magazine.

Sir—As the present method of preserving anatomical preparations in the wet state is very expensive, and as the difficulty which arises in preventing evaporation, renders it doubly so, I think a cheaper method might be adopted which would render the preparations whiter, and not give them that shrivelled appearance which the spirit produces. The plan I have adopted is using the diluted sulphuric acid of the shop, in lieu of the spirit; and I find that the preparations which I have so made, have a whiter appearance than those prepared with spirits, and are not wrinkled on the surface. As this information may prove of some utility to medical gentlemen forming museums for themselves, you will oblige me by giving it a place in your widely circulated magazine. A. Z.

A Correspondent informs us the following curious letter was found among the papers of Mr. Goldwyr, *a Surgeon, of Salisbury.*

To Mr. Edward Goldwyr, at his house on the Close of Salisbury.

Sir—Being informed that you are the only surgeon in this city, (or county) that anatomizes men, and I being under the present unhappy circumstances, and in a very mean condition, would gladly live as long as I can; but, by all appearance, I am to be executed next March, having no friends on earth that will speak a word to save my life, nor send me a morsel of bread to keep life and soul together until that fatal day; so if you will

vouchsafe to come hither, I will gladly sell you my body, (being whole and sound) to be ordered at your discretion; knowing that it will rise again at the general resurrection, as well from your house as from the grave. Your answer, Sir, will highly oblige, your's, &c. JAMES BROOKE.

Fisherton-Anger Goal, Oct. 3, 1736.

Lines occasioned by the lamented death of JOHN HAIGHTON, M. D. F. R. S. *&c. &c. formerly Demonstrator of Anatomy at St. Thomas's Hospital; and many years Lecturer on Physiology and Midwifery at Guy's Hospital, &c. &c.*

"He being dead yet speaketh."—Heb. xi. 4.

Assisted by the Muses, I would raise
A plain, but feeble tribute to the praise
Of one whose name to me was always dear,
And dear to thousands whilst he tarry'd here;
And distant ages shall, with truth, proclaim
His private virtues and his well-earn'd fame.
Nations may tremble—states and empires fall—
But HAIGHTON's name shall long outlive them all:
A man of science, gathering every hour
Some sweet from Nature's wide expanding flower:
No ostentation mark'd his steady way;
Seen in his duty each revolving day.
This in his eye, he met the rising morn,
And oft-times hail'd it, at its opening dawn.
Truth, gratitude, and love, must here combine,
To say—a life of usefulness was thine.
Sequester'd far from noise, from pomp, and show,
He pass'd his days, whilst sojourning below:
His kindly heart could feel another's grief;
His hand stretch'd open to afford relief;
His feet, at all times ready swift to move,
And thus perform the offices of love.
See flocking round his hospitable door,
A crowd of needy and afflicted poor!
That they some kind assistance might obtain:
Nor did they ever seek his aid in vain;
He ne'er could say—go hence, and come again.
But time would fail his virtues to record,
His labours o'er—he meets a rich reward;
No pain of body to distress him there,
Exempt from trial or domestic care:
Gone to a world of purity and rest,
To dwell with angels, and be ever blest;
Waste must his body—and his bones decay,
But HAIGHTON's fame shall never fade away.

Southwark, April 10, 1823.

LITERARY INTELLIGENCE.

In the press, a translation, by J. S. FORSYTH, of "Precis elémentaire de Physiologie," (tome second.) Par F. Magendie, illustrated with notes from the Physiological Journal of the same author.

Shortly will be published, a Letter to the Right Reverend Dr. MILNER, Catholic Bishop, on the Controversy between Mess. LAWRENCE, ABERNETHY, and RENELL, on the subject of the Human Soul and Organization.—By VIOLA.

TO CORRESPONDENTS.

A review of a voluminous medical work, lately published, is preparing for our succeeding numbers.

Y. Y. came too late for insertion this week.

The communications of PH. MED. *are received. In the case of* PARACENTESIS CEREBRI, *we regret not being favoured with a "local habitation and a name" to support it. It is, nevertheless, under consideration, and will doubtless be inserted in our next, provided, in the mean time, the author will comply with our request. We refer him to our columns for the use we make of his other articles.*

Our correspondent at PARIS *is selecting cases, expressly for this work, which will be sent to press the moment they reach us.*

*We regret to hear that the "*REVIEWER," *we mean the "*INTELLIGENCER," *is labouring under such a severe attack of aphonia as to have lost entirely the power of articulation; we hope, bad as the case may be, that the recurrent nerves, as has been reported, are not completely divided from the late accident.*

In answer to OBSTETRICUS, *whether* Dr. RICHARD REECE, "*of London,*" *be the same individual who bowed so lowly at the* SHRINE *of the far-famed* JOANNA SOUTHCOTT, *and the present nostrum-monger whose name is identified with a certain quack periodical, and another work on medical* SLANG, *we cannot at present vouch in the affirmative, but we will endeavour to satisfy his curiosity, as well as our own, as early as possible.*

All Letters, &c. (post paid) addressed for the Editors, at the Publisher's, &c.

London:

Printed by E. JUSTINS, 41, *Brick Lane, Spitalfields.*

Published by COX and SON, St. Thomas's Street, and 39, High Street, Southwark. Sold also by Sherwood, Neely, and Jones, Paternoster Row; Simpkin and Marshall, Stationers' Court; Callow and Wilson, Princes' Street, Soho; John Cox, Berner's Street, Oxford Street; E. Wilson, Corner of Royal Exchange; Chappell, Cornhill; W. Turner, Cheapside; T. Boys, Ludgate Hill; H. and W. Smith, 192, Strand; G. Roake, 31, Strand; Sams, St. James' Street; W. Stewart, South Bridge Street, Edinburgh; and Hodges and M'Arthur, Dublin.

THE WEEKLY

MEDICO-CHIRURGICAL & PHILOSOPHICAL MAGAZINE.

No. XI.] SATURDAY, APRIL 19, 1823. [*Price* 4*d*.

" FLORIFERIS, UT APES, IN SALTIBUS OMNIA LIBANT
OMNIA NOS, ITIDEM, DEPASCIMUR AUREA DICTA."

Some Account of M. BICHAT'S *Theory of Life.**

EVERY thing around living bodies, according to M. Bichat, tends constantly to their destruction. And to this influence they would necessarily yield, were they not gifted with some permanent principle of reaction. This principle is their life, and a living system is therefore necessarily always engaged in the performance of functions, whose object is to resist death. Life, however, does not consist in a single principle, as has been taught by some celebrated writers, by Stahl, Van Helmont, and Barthez, &c. We are to study the phænomena of life as we do those of other matter, and refer the operations performed in living systems to such ultimate principles as we can trace them to, in the same way that we do the operations taking place among inorganic substances. The chemist refers the phænomena of his science to the chemical, the natural philosopher to the physical, properties of matter. So in physiology we are to analyse the functions, as we study them, and thus discover the properties or powers of living systems, to which they are to be attributed.

Living systems are thus found to be endowed with certain properties, powers, or principles, the chief of which are those of feeling and moving, by whose possession their organs are rendered capable of performing the functions upon which the continuance of life depends. Life, then, according to Bichat, is the state of being, produced by the possession and exercise of what he calls the vital properties; yet he does not always adhere with logical strictness to this definition, but rather uses the term sometimes to designate collectively the vital properties themselves, and this, perhaps, is its best and most convenient sense. His essential doctrine, however, is, that there is no one single, individual, presiding principle of vitality, which animates the body; but that it is a collection of matter gifted for a time with certain powers of action, combined into organs which are thus enabled to act; and that the result is a series of functions, the connected performance of which constitutes it a living thing.

This is his view of life, considered in the most general and simple way. But in carrying the examination further, he points out two remarkable modifications of life, as viewed in different relations, one common both to vegetables and animals, the other peculiar to animals. The vegetable exists entirely within itself, and for itself, depending upon other substances only for the materials of nutrition; the animal, on the contrary, in addition to this internal life, has another, by which he connects him-

* From the North American Review, No. xxxvi. p. 145.—Marie Francis Xavier Bichat was born in 1771. He studied under the celebrated Desault, whom he assisted to the end of his life in his practice, in his studies, and in his lectures. At the age of 27 he published his Treatise on the Membranes; and in the succeeding year his Researches upon Life and Death. His next work was his General Anatomy; and he began a work on Descriptive Anatomy; of which he lived to complete only two volumes. He died in 1802, in the thirty-first year of his age, greatly esteemed and regretted.

self with objects about him, maintains relations with them, and is bound to them by the ties of mutual dependence. This affords a principle, upon which to form a distinct classification of our functions. Those which we have in common with the vegetable, which are necessary merely to our individual bodily existence, are called the functions of *organic life*, because they are common to all organized matter. Those, on the other hand, which are peculiar to animals, which in them are superadded to the possession of the organic functions, are called the functions of *animal life*.

Physiologically speaking, then, we have two lives, the concurrence of which enables us to live, and move, and have our being; both equally necessary to the relations we maintain as human beings, but not equally necessary to the simple existence of a living thing. By our *organic life*, food proper for our nutrition is first submitted to the operation of digestion, is then thrown into the circulation, undergoes in the lungs the changes which respiration is intended to effect, is then distributed to the organs to be applied to their nutrition; from these, after a certain period, is taken away by absorption, thrown again into the circulation, and discharged at length from the system by means of the several exhalations and secretions. This is the life by which all the parts of the body are kept in a state of repair; it is the life of waste and supply; necessarily subservient to the performance of those functions, which are the distinguishing characteristics of our nature, but not at all engaged in their performance itself. By our *animal life*, on the contrary, we become related to the world about us; the senses convey to us a knowledge of the existence of other things beside ourselves; a knowledge also of their qualities and their capacities for producing pleasure or pain; we feel, we reflect, we judge, we will, and react upon external things, by means of the organs of locomotion and voice: according to the result of these mental operations, we become capable of communicating and receiving pleasure and pain, happiness and misery. In fact, by the organic life we merely exist negatively; by the animal, that existence becomes a blessing or a curse, a source of enjoyment or of suffering.*

(To be continued.)

CASES FROM THE APPENDIX TO THE SECOND EDITION OF SIR A. COOPER'S WORKS ON DISLOCATIONS AND FRACTURES, (JUST PUBLISHED.)

(Continued from page 146.)

In examining the neck of the thigh bones in old and diseased persons, extraordinary and very unexpected changes will be found. It is very common to observe the neck of the bone in a great degree absorbed, and if

---

* After the death of Bichat, a work was published by M. F. R. Buisson, embracing the same parts of physiology as the Researches of Bichat, but with some modification of his views, which, however, had been submitted to his revisal, and met with his approbation. Buisson was a particular friend of Bichat, and one of the editors of the three posthumous volumes of the *Anatomie Descriptive*. Man, he defines to be an intelligence administered [*servie*] by organs; and upon this view of his nature, founds a physiological classification, the same in effect as that of Bichat. The organs are of two classes: 1. Those immediately subservient to the purposes of the intelligence, such as the eye, the ear, the organs of locomotion, of voice, &c. and these, taken together, form the *active life:* 2. Those not immediately connected with the intelligence, and not under its control, which are yet necessary to it, from nourishing and preserving the instruments with which it does immediately operate, such as the stomach, the heart, the lungs, &c. these form the *nutritive life*. This division, it is obvious, does not differ essentially from that of Bichat; and, although perhaps a more original and beautiful point of view, from which to look at man, as a subject of physiology, it is less perfectly applicable to life, considered as a whole, and possessed by a long series of animals and vegetables.

a perpendicular section be made of such a bone near to its cartilaginous surface, the head of the bone will form one portion, the trochanter another, and a portion of cartilage will unite them.

The head and neck of the bone are sometimes so much softened as to be incapable of being removed from the acetabulum without being broken. During the present winter this happened in each neck of the thigh-bone, in a subject in the dissecting-room at St. Thomas's Hospital.

It often happens, that the neck of the thigh-bone is bent down so that the head nearly touches the shaft of the bone, giving it, to an inexperienced eye the appearance of fracture.

When the neck of the thigh-bone of some persons is cut through, a line of solid bone will be seen proceeding from its shaft upwards, through the neck of the bone, having the character of a fracture united.

If the edge of the acetabulum be diseased, a projecting circle of bone will be often seen surrounding the neck of the thigh-bone, looking like an united fracture.

These circumstances must be first well inquired into before persons can form a clear judgment upon the subject of fractures, or they are constantly liable to mistake the effects of age and of disease for fractures of the bone.

After this follows a letter to Sir Astley from Mr. Stanley, Assistant Surgeon and Demonstrator of Anatomy, stating that in the Museum of St. Bartholomew's there are twelve specimens of fractures in the neck of the thigh bone; six external to the capsule, and united, and six within the capsule. In three of the latter there is no union, and in the other three the union is by ligamentous matter. Also one from Dr. Monro, Edinburgh, and another, Mr. Colles, Dublin.

Dr. Monro, in answer to a query from Sir A. relative to fracture of the thigh-bone, states, that he only had an opportunity of examining two cases after death, in both of which the broken ends of the neck of the bone were united by a substance somewhat like to ligament; and that he has seen several persons who had, during their lives, a fracture of the neck of the bone, but in all of them a bony reunion had not taken place.—Further, that in the Museum bequeathed to the University by his father, mention is made of a fracture of the neck of the thigh-bone having re-united by a bony union, but that upon examining the preparation attentively there appeared to be no fracture, but a disease in the trochanter major, &c. Dr. Monro also observes, that there is a specimen in the Museum of a fracture of the thigh, about four lines beyond the insertion of the capsular ligament, at the root of the trochanter.

Extract from Mr. Colles's letter to Sir Astley.

"I have carefully examined all the specimens of fractures of the neck of the thigh-bone contained in both Museums of our College of Surgeons. In that which is appropriated to the use of the school, I find seven instances of fracture within the ligament, each of these have been described in my paper on this subject, in the Dublin Hospital Reports. Since the publication of that essay, the Conservator of our College-Museum has collected five specimens of fracture within the ligament. In this Museum are also four instances of fracture external to the condyle ligament. In the School-Museum are two instances of fracture external to the ligament. Of this latter description of fracture, less than one half the number are united by bony union. Of the fractures within the ligament not one has made a nearer approach to bony union than that described in the paper alluded to. I must say, that I have never yet seen an instance of bony union where the fracture had been within the ligament."

(To be continued.)

MEMOIR.

(Continued from page 147.)

I have next to notice the *physiological principles*, which are declared to afford such great aid in disclosing the anatomy

of the brain. The leading principle of this physiology is, that the cortical or grey matter of the brain, though admitted to be very vascular, is in fact a part 'destitute of apparent organization,' *(sans organisation apparente)*. Though thus unorganized, however, it performs, according to this physiology, a very singular office—that of nourishing the organized white substance. 'Nous la considerons, comme la matière nourricière de la substance blanche,' say Drs. Spurzheim and Gall; and they affirm, that all the white fibres of the brain originate from this grey matter, which is therefore denominated the *matrix* of the nervous fibres.

The whole of this statement of the structure and functions of the grey matter, Dr. Gordon declares to be not only destitute of the slightest evidence, but at variance with the first principles of physiological science. 'Every vascular part,' he contends, 'is formed by its own vessels; 'and there is just as little reason for ima- 'gining the *white fibres* of the brain to be 'produced by the *grey matter*, as there 'would be in supposing that the skin 'forms the cellular substance which it 'covers; or that substance the muscles; or 'the muscles the bones." Nevertheless, this hypothesis, under the abused title of physiological principles, pervades almost all the descriptions of these anatomists, and is the fruitful source of many of their alleged discoveries. On its authority, they assert the presence of grey matter in parts, in which not only none others have ever observed it, but have even declared it to be white; and they announce the production of some fibres, and what they call the 'reinforcement' of others, which have no title to existence but what this hypothesis affords. He, therefore, who may desire to see and believe all that these anatomists profess to describe, must first quicken his eye at the shrine of his fancy; and, for the ordinary display of anatomical demonstration, must consent to receive the gratuitous assumptions of a most clumsy and absurd hypothesis.

One of the leading discoveries which, by the help of these new methods and principles, Drs. Gall and Spurzheim profess to have made, is, that the white matter of the brain has a *fibrous* structure. This fibrous structure they elsewhere declare to be the first and most important of all their discoveries, without which all the others would be imperfect. In reply to the French anatomists, they were, however, obliged to admit, that many others had previously recognised the white substance to be in general fibrous. Driven thus from the ground of priority, they next maintained there was not one who had asserted that it is fibrous under all its forms, and in all its regions; and that even those who, with Sœmmerring and Cuvier, recognise a fibrous structure in many parts of the brain, have not dared to say that it is *everywhere* fibrous. But, by an overwhelming series of quotations from their several works, Dr. Gordon has shown that Malpighi, Vieussens, Leuwenhoek, Haller, Mayer, Reil, Cuvier, and Portal, had all described the general fibrousness of the brain; and that Vieussens, Haller and Portal, in particular, speak of it as being *everywhere* fibrous. It is plain, therefore, that what these anatomists declare to be the first and most important of their discoveries, has long been familiarly known to others, both of earlier and more recent times; and that thus the new facts which they claim to have discovered, like the new methods which they pretend to have invented, were known and employed long before they could have lived to apply the new *physiological* principles to investigate the structure of the brain.

It is a curious fact, however, that whilst the hypothesis of these anatomists is said to have afforded such powerful aid in the alleged discovery of the universal fibrousness of the *white* substance of the brain, it should have failed altogether in disclosing another point of structure in this organ, not less visible in itself, nor less easily rendered obvious—namely, that of the fibrous structure of the *grey* matter of the brain; which matter both Sœmmerring and Reil represent as exhibiting a fibrous appearance when lacerated, either in its recent state, or after induration in alcohol. So far, therefore, the evidence of fibrousness in one case is precisely the same as in the other: and if a fibrous appearance be deemed sufficient proof of the fibrous structure of the white matter, it cannot be deemed insufficient to establish that of the grey matter also.

(To be continued.)

Observations on Phrenology, as affording a systematic View of Human Nature.

(Continued from page 149.)

"It is remarked," says Fodéré, in his traité du Goitre et du Crétinisme, p. 133, "that by an inexplicable singularity, some of these individuals (cretins) endowed with so weak minds are born with a particular talent for copying paintings, for rhyming, or for music. I have known several who taught themselves to play pass-

ably on the organ and clavecin; others who understood, without ever having had a master, the repairing of watches, and the construction of some pieces of mechanism." He adds that these powers could not be attributed to the intellect, "for these individuals not only could not read the books which treated of the principles of mechanism, *mais ils etaient deroutès lorsqu'on en parlait*, et ne se perfectionnaient jamais."

Pinel speaks of a female idiot who had the most astonishing propensity to imitate whatever she heard or saw done. She repeated whole sentences, but without attaching any idea to them. He distinctly admits the fact that individuals exist who from birth possess a limited capacity for receiving certain kinds of ideas, and an utter incapacity for all other kinds; or, in other words, who possess one or more faculties of the mind to a limited extent, and appear to be deprived of all the others. Every writer on insanity, as Rush, Haslam, Esquirol, admits the partial developement of certain powers of the mind in idiots, and Rush in particular not only alludes to the powers of intellect, but also to the partial possession of the moral faculties. Some idiots, he observes, are as remarkable for correct moral feelings, as some great geniuses are for the reverse. One never utters an intelligible sentence, because he does not comprehend it, although he can repeat the words automatically, like a magpie or parrot, while another not only understands the words of his mother tongue, but even delights in speaking. One is all good nature and complaisance, another quarrelsome and mischievous. One is pious, and another obscene. Dr. Rush mentions one who was remarkable for his religious feelings, and we have frequently seen an idiot who could never connect two sentences, except when engaged in devotion, to which he had a natural tendency. He was able to repeat a prayer verbatim, after hearing it two or three times. Fodéré calls these "inexplicable singularities." No one will suspect him of favouring phrenology by reporting cases which have no existence, and as they exist, we really agree with him in saying that they are truly inexplicable on the general supposition of the mind manifesting all its powers by the medium of a single organ. The phrenologist, on the other hand, says that to him they offer no such difficulty, for supposing it proved that each faculty manifests itself by the medium of a separate organ, it is as easy to conceive that one of these organs may be defective from birth, with or without a corresponding deficiency in all the others, and of course with a deficiency in the faculty connected with that organ, as it is to conceive that the organ of hearing may be unfit for performing its function, while those of sight, taste, smell, and touch, may either remain unimpaired, or may be impaired to a less degree. In the case of the external senses, he maintains, we never hesitate in assigning the cause and seat of the deficiency to the organ which executes the function of the diseased sense. We never refer it to a difference in the constitution of the immaterial principle. Then why should we not also refer defects in the internal senses or faculties to an imperfection in the state of the organ of the particular faculty in fault? It would certainly be far more philosophical and consonant to Nature to do so, than to say that God had created souls of idiots and souls of men of genius.

(To be continued.)

PHYSIOLOGICAL OBSERVATIONS

Animal Physiology.

The Physiology of the Mollusca was the subject of Dr. Roget's seventh Lecture at the Royal Institution. The term Mollusca has been applied to all those animals whose bodies are of a

uniformly soft consistence, and which at the same time possess complete systems both of circulating and of respiratory organs. Cuvier is the first who proposed assembling together, under one great class, the numerous genera of animals to which these characters apply. The model upon which they are constructed is entirely different from that of vertebrated, annulose, or radiated animals; and the arrangement of the parts of the nervous system is upon a much simpler plan than in the other classes.

The sensitive functions are much less developed in the Mollusca than in the class of Insects. Few, indeed, possess any other sense than that which is common to the whole of the animal kingdom, namely, that of touch. In many this sense is particularly exercised by organs which may be termed tentacula, affixed to different parts of the surface of the body, and generally on the head, or about the mouth. Some have minute eyes, and a few have rudiments of the organs of hearing. They are supposed to possess the sense of smell, but no organ has been discovered appropriated to convey the impressions of such a sense. Cuvier conjectures that the whole surface of the skin is endowed with the property of being sensible to these impressions. Professor De Blainville, in his recent work on Comparative Anatomy, states that the tentacula are the organs of this sense.

Dr. Roget proceeded to give a general account of the functions of locomotion, of digestion, circulation, and respiration, in this class of animals. He noticed the complex arrangement of muscular fibres in the moving parts, by which the same organ was adapted to the execution of various actions of retraction, elongation, or different inflexions, according to the object to be answered. The structure of the cloak, or mantle, as it has been termed, which envelopes all the viscera, or soft organs concerned in the vital functions, and which is a characteristic feature of the molluscous organization, was described; together with the calcareous covering, or shell, which is formed by the vessels of the mantle. In most cases the shell is external, being deposited by the external surface of the mantle. Sometimes, however, it is internal, being formed in the thickness of the mantle itself, to which, therefore, it adheres in all its surfaces. Those species which have an external shell, are called *testaceous mollusca;* those which either have no shell, or in whom the shell is internal, are denominated *naked mollusca.* It appears from the circumstances mentioned by Dr. Roget, that the possession or absence of a shell has no very marked influence on the essential parts of the structure or the physiology of the animal itself, and ought not therefore to be assumed as the basis of a scientific classification of this department of Zoology. After stating the Linnæan method of arrangement, he proceeded to explain the new system founded on the discoveries of Cuvier and Lamack, relating to the comparative anatomy of this class of animals. To the three principal orders of Cephalopoda, Gasteropoda, and Acephala, Cuvier has since added the lesser orders of Pteropoda, Brachiopoda, and Cirrhopoda.

A review was then taken of these several orders, beginning with the Cirrhopoda, which stand lowest in the scale, and finishing with the Cephalopoda, which occupy the highest station. The Balanus, or Barnacle, and the Lepas Anatifera, or Acorn-shell, which belong to the Cirrhopoda, were shown to have a great analogy with the Crustacea. It has often, indeed, been doubted whether they did not more properly belong to this latter division of animals, rather than to the Mollusca. As their structure is thus found to unite many of the essential characters of both these classes, they may be regarded as

forming a remarkable link of connexion between these two classes in the natural series of animals.

In the Brachiopoda, an order which includes only three genera, namely, the Terebratula, Lingula, and Obricula, we may trace a nearer approach to the general type of the Mollusca. Instead of the articulated tentacula of the Cirrhopoda, we find, in these animals, two fleshly and ciliated arms, which are moveable and retractile, and arise on each side of the mouth. The Mollusca comprehended under the order of Acephala, of which the Oyster may be taken as an example, have no visible head, or any of those organs of sense, which are usually situated in the head, as those of sight and hearing. The mouth is concealed within the fold of the mantle, the two portions of which are doubled together, forming usually the immediate lining of the shell, which is of the bivalve kind. The stomach is completely surrounded by the liver. The circulation is aortic, and the gills are composed of broad laminæ, forming fringes, arranged in rows. The brain is situated between the gills and the stomach. The most singular part of their structure is, that the intestine, in almost every instance, actually traverses through the cavity of the heart. The obvious intention of this passage is to afford an opportunity to the chyle, prepared in the intestine, to pass through its coats, and to be collected at once in the cavity of the heart, and be immediately circulated through the arterial system. The necessity of expedients for the transference of the chyle from one part of the system to the other, is thus avoided, and the function of lacteal absorption is thus economised.

Among the acephalous Mollusca that are unprovided with shell, the Ascidia and the Salpa are most remarkable. The body of the Ascidia is contained in a large globular bag, of a cartilaginous substance, formed by the mantle, and having only two external apertures. One of these, although it admits the food, is not, properly speaking, the mouth, for it opens into a cavity containing the gills only, and therefore appropriated solely to respiration.

(Concluded in our next.)

HOSPITAL REPORTS.

LONDON HOSPITAL.

Wednesday, April 9.—Operation for lithotomy, by Mr. Andrews, upon a small subject, aged 64, which was dextrously performed by the operator, and as stoically endured by the patient. Inflammation shewed itself on the evening of the operation, which threatened serious danger; but, by using the proper means, it was subdued, and the case is now going on towards a favourable termination.

Saturday, 12th.—Sir William Blizard operated for hare lip, on a lad about twelve years of age: doing well.

Wednesday, 16th.—Mr. Headington extracted the whole of the right eye, in consequence of a large fungous exuberance issuing from the orbit. Subject, a middle aged woman. Case going on as well as can be expected.

ST. THOMAS'S.

April 10.—A boy was taken into this Hospital, about twelve o'clock, P. M. under the following circumstances. It was stated that he had taken something from a lad in the street out of a bottle under the name of liquorice water; about five minutes afterwards he fell down in the greatest agony from excruciating pains in the stomach and abdomen. He was removed immediately to Mr. Pell's, (chemist and druggist, High Street, Borough,) where a grain and a half of tartarized antimony was prescribed which proved emetic, from whence he was conveyed to the hospital. Here, also, an emetic, (sulph. zinci.) was thrown in, which operated violently, and something having the appearance of blood was brought up. Some red spots on his trowsers having attracted notice, it was conceived he had taken an acid. Lime water, and, afterwards, magnesia were given; his pulse, at this time, was scarcely perceptible at the wrist, but the carotids were observed to beat. The question now was to determine, from the spots on his trowsers, which were of a blue colour, what acid he had taken. Sulphuric acid, in consequence, was applied to the pantaloons which turned them the exact colour with that produced by the contents of his stomach falling on them. A solution of oxalic acid was also tried, which gave a yel-

lowish brown. Nitrous acid, a yellow brown of a lighter hue. Carbonate of ammonia applied to these stains produced a slight effervescence, but those caused by the sulphuric acid a much stronger. From these experiments it was concluded that the latter was the noxious substance the boy had inadvertently taken. An enema of castor and sulph. magnes. in gruel, was thrown up.—Wednesday. Boy much better—pain in the belly and tenderness to the touch still continue. Lime water and magnes. exhibited.—Thursday. Slight tenderness and pain, pulse full, with flushed face. Med. continued, with common fever mixture, &c. Recovered.

FRACTURE WITH DEPRESSION.—Henry Mahony, a lad about 12 years of age, was taken into St. Thomas's Hospital, on Wednesday last, (April 9,) with very extensive fracture of the parietal, temporal and frontal bones. The accident was occasioned by the running away of a horse, which was killed by the resistance it met with, at the time this melancholy circumstance took place. The bones were considerably depressed and comminuted. Mr. Travers raised a portion of the depressed bone, but without producing any sensible effect upon the patient, who remained comatoze until Sunday evening, when death closed the scene. When the accident was first examined, small portions of the brain were observed oozing through some of the lacerated integuments, which gave a puffy sensation to the touch: right side of the patient became paralysed—the left arm agitated considerably on being touched—the pulse continued rather full—pupils dilated. Mr. T. ordered venesection to the amount of eight ounces.

AMPUTATION BELOW THE KNEE.—In our last Number, we reported the case of a Swede, the subject of amputation, in consequence of being frost-bitten; since which he has had the other leg removed from the same cause. Mr. Tyrrell was also the operator in this case.

ANEURISM OF THE FEMORAL ARTERY.—About three months ago, the patient was admitted into St. Thomas's Hospital, with aneurism of the femoral artery, which had come on spontaneously. Mr. Travers performed the operation, and after a short time, the man was dismissed, well. About a fortnight ago, he was re-admitted with a similar aneurism on the opposite extremity to that already operated on. He submitted to the same operation again under Mr. Travers, on Friday last, (April 11th,) and is now doing well.

GUY'S.

Monday, April 14.—Mr. Key trephined for compression—patient since dead.

Case of Paracentesis Cerebri, communicated by Mr. GEORGE SEWELL, *a Pupil at St. Bartholomew's Hospital.*

On the 10th of July, 1822, I was requested by a medical friend (now in the West Indies) to accompany him to see a case of chronic hydrocephalus, in which he proposed to perform the operation of paracentesis cerebri. The patient, Thomas Cary, of Belton Street, Long Acre, was a boy two years of age, who had been afflicted with this disease fifteen months; the head had rapidly increased in size from its commencement, and it now measured fifteen inches in circumference.

All the circumstances being considered, and the consent of the parents obtained, we agreed to perform the operation, which was done in the following manner:—A puncture was made through the anterior fontanelle with a small hydrocele trocar, from which the water freely flowed, until about four ounces were discharged, as near as we could guess: the canula was then withdrawn, and a compress placed upon the aperture, confined by a proper bandage; the patient was then put to bed, and appeared very comfortable.

I kept a firm but gentle pressure upon the parietal bones with my hands, and felt them gradually receding as the water flowed: the patient shewed no symptoms of uneasiness during the operation.

We called again in the evening, and found our patient in a comfortable slumber: there had been an evacuation from the bowels since the morning, and the child had eaten some bread and milk. The pulse was quiet, and had rather decreased in frequency since the operation.

11th. Were informed by the mother that the child had not had convulsions during the night, which had not been the case for several weeks previous. Bowels had not acted since yesterday; ordered a powder of calomel 2 gr. rhubarb ϑ. In other

respects there was no alteration in our patient.

3 o'clock, P. M.—The powder has operated once—no febrile symptoms—had slept two hours since the morning. The child appeared to take some notice of surrounding objects, and particularly of its mother, who expressed her conviction of the benefit derived from the operation. Should the symptoms remain favourable, we expressed our intention of making another puncture on the morrow.

12th.—Had passed a comfortable night with free perspiration—bowels regular, and no alteration in the pulse. Four ounces more of the water evacuated in the same manner as before: when the canula was withdrawn the tube contained a small portion of the cerebral substance. We did not observe the slightest convulsion when the trocar was introduced. Having replaced the bandages, and ordered one of the powders to be given, we departed.

3 o'clock, P.M.—Powder had operated once—had slept about an hour since the morning—no alteration in the pulse—appetite good—symptoms as favourable as on the preceding day.

13th.—Were much surprized to find our patient this morning fast sinking; pulse scarcely to be felt—breathing stertorous, and a glassy appearance of the eyes, indicating the near approach of death, which took place in the course of the day.

It may be proper to remark, that the bandages had been removed in the night by the mother, as the child had been restless and uneasy, causing a copious discharge of water, and all the fatal symptoms which immediately followed, destroying at once our own hopes and the life of the patient.

Analysis of an Experimental Enquiry on Poisoning by Oxalic Acid.—By Robert Christison, M.D. *Professor of Medical Jurisprudence, &c. &c.* and Charles W. Coindet, M. D. *Geneva, Member of the Med. Chir. Soc. of Edinburgh, &c. &c.*—*(From the Edin. Med. and Sur. Journal.)*

This excellent paper in which the above experimental enquiry is ably detailed, was read before the Medico-Chirurgical Society of Edinburgh, Jan. 8, and Feb. 5, 1823.

After some preliminary observations, enumerating the different ways by which poisons have been supposed to act, the first step proceeds to ascertain whether the substance in question really belongs to the class of corrosive poisons; a circumstance that may be determined, by considering, whether, like them, it acts universally in the direct ratio of its quantity and state of concentration. From the examination of the stomach, &c. of a dog, four minutes after death, into whose œsaphagus half an ounce of oxalic acid, dissolved in twice its quantity of water, had been injected, it appears, that oxalic acid, when given in large quantities, and in the greatest state of concentration that may be conveniently managed, produces considerable extravasation within the mucous coat, and into the cavity of the organ, frequently an abrasion of its epidermis, and sometimes, though rarely, a peculiar softening of its corion.

From other experiments made to ascertain the changes upon the dead stomach, in order to point out the mistakes that have arisen from confounding the two actions with one another, the epidermis separated into a single flake, became thickened and brittle, of a greyish colour, and, upon the whole, similar to what was produced in the living stomach. The corion was translucent, its surface very pulpy, and the serous membrane grey and crisped. When the immersion (a portion of the healthy stomach of a dog held, in the first instance, in a saturated solution at 130°, the same as in Exp. 1.) was prolonged five minutes, the whole corion became gelatinous.

The effect of a saturated solution at 50° was also tried. From the whole of these experiments it appears that oxalic acid, when concentrated coa-

gulates albumen, but has no effect upon it in other circumstances. It gives to pure fibrin a degree of elasticity and translucency greater than it naturally possesses, but without dissolving it, and it bleaches common muscle, and preserves it from putrefaction, without sensibly altering its condition; but, on the contrary, it dissolves gelatin and even very rapidly.

When 25° grains of isinglass were placed in half an ounce of a temperate solution containing 30 grains of acid, it began to soften and swell in two or three minutes, and in 12 or 16 hours was reduced to an uniform jelly like mass. Pure water, at the same temperature, produced, in 30 hours, no other effect than slight softening and flexibility.

From the preceding observations the following conclusions have been drawn:—

1. Concentrated oxalic acid renders the mucous epidermis brittle and less adherent. It dissolves the other coats; but, during life, this action never extends beyond the surface of the corion; and seldom so far: hence its action on the living system is more like that of the pure irritants, producing extravasation of blood within the tissues, and into the cavity of the stomach, and little chemical decomposition.

2. But its action on the dead stomach is so rapid, that, if the examination of the body be delayed a few minutes, the whole corion, and even the other coats, will be found dissolved; and the diluted acid will also have the same effect, though more slowly. Hence it is easy to explain why Mr. Thomson, in his experiments, found so much apparent corrosion. In fact he always allowed an interval to elapse sufficient for the acid to act extensively on the dead tissues.

3. The chemical action of the oxalic acid is not owing, as Mr. Thomson conjectures, to mutual decomposition of the acid and stomach: it is one of pure solution, in which the acid and the animal principles of the tissues remain unaltered.

Having ascertained in this manner the precise mode in which oxalic acid acts when highly concentrated; the next object was to discover, whether, like the irritant poisons in general, its deleterious properties were impaired or destroyed by dilution. For this purpose 33 grs. of the concrete acid were given to a dog weighing between eight and ten pounds, dissolved in six ounces, or 87 parts, of tepid water. In two minutes, the animal made violent efforts to vomit; in eight and a half, he was seized with certain remarkable symptoms (to be noticed as we proceed) very different from those witnessed in the former experiments, which have been universally produced by oxalic acid when much diluted. In half an hour from the beginning of the experiment the dog expired.

We were forcibly struck with the violent action of so small a dose in so diluted a state, and still more when we found, on examining the body, that, excepting a slight cincritious tint of the mucous epidermis, no unnatural appearance whatever could be detected in the stomach.

It follows, that the action of the poison in its diluted state is very different from that of the concentrated acid. But to place the distinction in a clearer point of view, we thought it necessary to give the concentrated acid in such a manner as to furnish an exact point of comparison with the experiment just related. The same quantity, dissolved in two parts of tepid water, was therefore given to a dog of the same weight, and about the same age. In seven minutes he strove to vomit, and continued to do so at distant intervals for an hour and a quarter. At that

time, the peculiar symptoms of this kind of poisoning began, and he died about the end of the sixth hour. The appearance of the stomach was, in a few places, such as we have shewn to be produced by the concentrated acid.

These experiments were variously repeated, and with analogous results —from which it appears, that a small quantity of acid kills an animal ten or twelve times sooner when much diluted than when highly concentrated; and that the diluted acid must act in some other way than as a simple irritant.

(To be continued.)

Case of Strangulated Herina, followed by Dysentery, &c.

(Concluded from page 153.)

8th.—He had slept comfortably. Pulse 92. Sickness nearly gone. Tongue moist. The tension of the abdomen had disappeared. He expressed himself as feeling much easier and better, but extremely weak. He had passed three very hard, black, offensive motions. The third costive motion was soon followed by a violent diarrhœa, after which the powders were omitted. This *evening*, the pulse was 88, very low, and intermitting. He was ordered to take a wineglassful of porter frequently, and the following draught:—℞ Ammon. Carb., ℈ss. Tinct. Opii, g^{tt}. xx. Aquæ Puræ, f. ℥iss. M. ft. haustus, 5tâ quâque horâ sumendus.

9th.—He had slept well. Pulse 84, fuller, but intermitting. No pain of the bowels, nor sickness. Increased thirst. Tongue dry and furred. He complained of pain in the chest, with oppression. Had taken beef tea. He had no motion since taking the first draught. Heat of skin, which was before lower, was now rather higher than natural. He was ordered to resume the aperient medicine, in small doses, and to take double the quantity of porter before allowed.—*Evening.* The pulse was 98, and very small. He had some sleep in the afternoon; and passed two evacuations. Heat of the skin was again lower than natural, particularly in the extremities. Medicines and diet were continued as before.

10th.—Pulse 100. Thirst very great. Tongue dry. He was quite free from pain in the abdomen, but complained of a soreness in the left side, in the situation of the false ribs, which had increased through the day. He had slept well in the night, perspired freely, but always awoke in a state of great alarm. Heat of skin natural. Appetite good. As he had not had a motion since yesterday, I ordered an increased dose of the aperient medicine. His voice had been, for three or four days, sometimes shrill, at others a mere whisper. The stimulant medicine was continued.

11th.—He had slept the greater part of the night. Pulse 88, fuller, and quite regular. Appetite good. Had had three copious motions. Thirst much abated. Heat of skin natural. He said he "felt himself quite a man this morning." He complained of sores on his shoulders, from pressure. In the course of this day he had several evacuations. The stimulant medicine was continued; but the aperient was omitted.

12th.—Pulse 94. Diarrhœa has continued. He, this morning, complained of pain in his eyes, and, on inspecting them, I found that he had opthalmitis, which had existed some days; for pustules had formed on each cornea, for which I prescribed a lotion, consisting of the solution of six grains of the sulphate of zinc in six ounces of rose water.

13th.—He had little or no sleep last night. Pulse 96, and extremely low. Eyes worse. Diarrhœa worse, and attended with tenesmus, and other characteristic symptoms of dysentery—the motions were bloody, and contained scybalæ. At three o'clock Mr. Key saw him with me. He was ordered to take small quan-

tities of wine, instead of the porter. The stimulant medicine was discontinued:—℞ Pulv. Cretæ Comp. ℈j. 2dâ quâque horâ.

14th.--The dysentery had harrassed him through the night. Pulse 84, and scarcely perceptible. His motions contained small pieces of something resembling portions of mucous membrane. His eyes were better. The ulcerated parts on his shoulders discharged a great deal. Deeming this a critical moment, I proposed to Mr. Key, who concurred with me in considering the case nearly hopeless, that our patient should take small doses of the ol. terebinthinæ; and immediately I prescribed the following—℞ Olei Terebinthinis, f. ʒj. Syrupi Croci, ʒss. Tincturæ Opii, ʒij. Mucilaginis Acaciæ, ʒv. Ol. Menth. Pip., gtt. ij. M. Sumat cochl. parv. j.; omni dimid. horâ.

At eleven o'clock this *evening* I found him much better; the turpentine had a wonderful effect. He has not had a motion since the first dose. Pulse was 80, and fuller. He slept soundly in the afternoon. Heat of skin natural. Thirst very great, and tongue dry. The medicine was directed to be taken less frequently. He was allowed to take arrow-root in milk, and to continue the wine in very small quantities.

15th.—Pulse 90. Thirst less; appetite good; heat natural; has had four motions in the night, but none through the day. Tenesmus much abated. Eyes more inflamed; and the face was this morning completely covered with a papular eruption. The medicine was directed to be discontinued, but to be again resumed if the dysenteric symptoms returned.

16th.—He slept well last night. Pulse 88. Eyes better. The sores on the shoulders were healing; but the appetite was not so good, and his spirits were more depressed. This *morning* he had not had a motion, but had frequently felt a tenesmus, for which I ordered him to take gu. opii, gr. j. 3tiâ quâque horâ. Since which, he has had one motion, attended with very little tenesmus. Continue the medicine.

17th.—Pulse 90. Slept well. Appetite better than it has hitherto been. He said he felt "a very great deal better." He had three motions in the early part of the night, attended with very slight tenesmus.

18th.—Pulse 84. He felt much better, in every respect, except a little tenesmus once or twice, which was removed by taking an opium pill.

19th.—He has not slept so well again. Appetite worse. He has had three motions, and the tenesmus has returned. Ordered to take the pills more frequently.

20th.—The pills relieved the tenesmus. He felt drowsy: his spirits were low; but his other symptoms were as before. The pills were discontinued:— ℞Tinct. Colomb., f. ʒss. Infus. Sennæ, ʒj. Infus. Gentianæ Comp., ʒivss. M. ft. mist. cujus capiat cyathus, 4tâ quâque horâ.

February 9th.—From the 20th of last month he gradually improved, with occasional slight relapses, and he is now in a perfect state of health; except that his lower extremities are weak; for which I prescribed the following liniment:—℞ Lin. Terebinth., ʒj. Liq. Ammon. Carb. Ol. Olivar. ā.ā., ʒss. M. ft. linit. bis terve die, ad sacrum applicand.

High Street, Borough.

MELANGE.

Magendie *on the action of pure emetin.*—The action of the pure emetin differs from that of the coloured only in being more energetic. Two grains are quite sufficient to destroy a large sized dog. I have seen vomiting produced by 1-16th of a grain in a man of eighty-five years of age, who, it is true, vomited generally with extreme facility. I have for some time made use of a pill composed as follows, viz. ℞ sugar ʒiv.

pure emetin gr. viij. to be made into pills of nine grains. To produce vomiting, one grain of the pure emetin, dissolved in a little acetic or sulphuric acid, may be administered in water. The following formula may be employed :—℞ Infusion of Linden flowers ℥iij. pure emetin, dissolved in a sufficiency of nitric acid, gr. j. syrup of marsh mallows ℥j. A spoonful at a dose should be given every quarter of an hour until vomiting is produced. A syrup may be made after the following manner :—℞ simple syrup ℔j. pure emetin, gr. iv.

MM. Lecanu *and* Serbat *on succinic acid in the turpentines.*—In extracting by heat the essential oil of turpentine from resin, obtained from the forest of Fontainbleau, these gentlemen remarked the formation of acicular chrystals, which they ascertained to be succinic acid. MM. Henri, Montillard and Parra have repeated their experiments uniformly with the same results.—*(Annales de Chimie.)*

Castor Oil.—The processes generally employed for the extraction of the oil from the seeds of the ricinus, are by boiling in water and by expression. The former is expensive, from the quantity of fuel it requires, and affords but a small proportion of oil, which becomes in some degree empyreumatic, from the heat necessary to separate the mucilage. By the second, a milder oil is obtained, it is true, but it is extracted with difficulty, from its viscidity and the great quantity of mucilage that accompanies it. These difficulties are overcome by the following process, founded on the property possessed by alcohol of dissolving the oil, and separating the mucilage. It consists in mixing the seeds, deprived of their rind, and beat into a paste, with a certain quantity of alcohol (four ounces to the pound at 36°,) of the centigrade thermometer; this mixture is subjected to the press; the liquid flows with great facility, and is afterwards distilled; the residue of the distillation washed away with many waters. The oil, separated by the water, is placed upon a gentle fire, to evaporate all the moisture; it is then taken from the fire, and thrown upon filters placed upon a stove heated to 36° : it filters freely, and the oil obtained is very clear and very mild. The products obtained in this way by M. Faguor, are ten ounces of oil from each pound of the peeled seeds, and only seven ounces with the peels on. These products greatly exceed the quantity by the old methods. Mr. Henry obtained a still larger proportion of oil, the difference probably depending on the superior force of his press. Half the quantity of alcohol employed may be recovered by the distillation.—*(Jour. de Pharmacie, Oct.* 1822.*)*

Dr. Paris *on tests for Arsenic.*—The high importance of unequivocal tests for substances employed with bad intent in poisoning, has in our courts been repeatedly demonstrated. —The admirable tests for arsenic brought to such perfection by Mr. Hume, of Long Acre, which Dr. Paris justly calls "a triumph in the art of analysis," may be misconceived or misapplied, by inattention to, and optical fallacy. The ammoniaco-sulphate of copper will precipitate arsenic in the form of Scheele's green. In the celebrated case at the Cornwall Lent assizes, 1817, it was maintained that a decoction of onions will, with this test, give a similar green precipitate. It will do so in a glass, but not on a bit of writing paper; by transmitted, but not by reflected light. In the case of the blue sulphate of copper seen through the yellow colour of the onions, it will appear green. In the same way, the yellow hue of corrosive sublimate, seen through the blue syrup of violets, appears green. Dr. Portier, of South Carolina, has remarked, that when carbonate of potash is added to a solution of copper in coffee, precipitate, like Scheele's green, is pro-

duced, when no arsenic is present; but this is explicable on the same optical deception.—*(Vide Silliman's Journal* III. 365.)

Dr. Zollekoffer *on the Prussiate of Iron.*—The prussiate of iron possesses the following advantages over the cinchona officin. as a remedy in intermitting and remitting fevers: it is void of taste, and may therefore be more readily exhibited, than the *officinal powder of bark*, which to some, is extremely unpleasant: it may be given in every stage of the disease; while the administration of bark is confined to the *apyrexia.* The dose is much smaller, being from four to six grains twice or thrice in twenty-four hours; or at morning, noon, and night: while bark, to be effectual, must be given in much larger doses. It never disagrees with the stomach, or creates nausea, even in the more irritable state, while bark is not unfrequently rejected. In its effects as a remedy calculated to prevent the recurrence of future paroxysms it is more certain, prompt and effectual, than the justly celebrated *cort. peruvian.* A patient thus will recover from the influence of intermitting or remitting fevers, in the generality of cases, in much less time than is usual in those cases in which bark is employed. In making use of the prussiate of iron as a remedy in disease, care must be taken to select that which is of a very dark blue, approaching to a black, having a shining coppery fracture, and adhering firmly to the tongue.—*(Chapman's Journal.)*

Dr. Pallas *on the abuse of oil in poisoning by cantharides.*—As oil is found to dissolve the active principle of cantharides, Dr. Pallas justly reprehends the usual directions given for administering oil in cases where it has been given in an over dose. M. Orfila proved the truth of this by macerating cantharides in cold oil. On giving this to dogs they died in a few hours.—*(Jour. de Phar.)*

A curious case of voluntary fasting.—A recruit, to avoid serving, had cut off the fore-finger of his right hand. When in the hospital for the cure of the wound, from a dread of the punishment which awaited him, he resolved to starve himself, and on the 2d of August began obstinately to refuse all food and drink, and persisted in this resolution till the 24th of the same month. During these twenty-two days, he took neither food, drink, nor medicine, and had no evacuation from his bowels. He had now become much emaciated, and his belly a little distended; he had a violent pain in his loins with great febrile heat, his thirst was excessive, and his behaviour had become timid. Having been promised his discharge without suffering punishment, he was prevailed upon to take some sustenance, and weak broth was tried, but his stomach would only bear lukewarm drinks. Under careful treatment he continued for a week to recover, when on the first of September he got a wild look and again refused food. Till the 8th he took a little barley water about every three or four days. From the 8th to the 11th he took a little biscuit and wine; but from this till the 9th of October, a period of twenty-eight days, he neither took food nor drink, nor had any natural evacuations. From this to the 11th he again took a little nourishment and began to recruit; when he finally renewed his resolution to starve himself, and persevered till his death, which happened on the 21st of November, after a total abstinence of forty-two days. —*(Hufeland's Journal.)*

Forstman on the effects of fasting, observes, "When the abstinence is not voluntary, the mental energy decays as the body becomes emaciated; but the pangs of hunger soon rouse it to madness and convulsion. Some appear to suffer little pain, whilst others are in great torment: but in general the most distressing symp-

tom is an inexpressible feeling of anxiety. It is thirst, however, for the most part, rather than hunger, which is troublesome. The length of time that a person is capable of existing under such circumstances is various. Children die in a few days; but adults have fasted for weeks, months, and even, it is said, for years."

VACCINE ESTABLISHMENT.

(Parliamentary Paper.)

A Report from the National Vaccine Establishment has been laid before Parliament, and ordered to be printed, (dated 26th March, 1823,) which states that more than usually numerous applications have been made to the Institution for Vaccine Lymph in the course of last year, and that supplies have been sent abroad to forty different persons in every quarter of the Globe. The Number vaccinated in the year 1821:—

At Ceylon is stated to have been	90,000
At the Presidency of Fort William	20,149
Presidency of Bombay.....	22,478

And the number vaccinated at the National Establishment in London, in the last five years, is stated to have been as follows, viz.

In 1818.....	5,490
1819.....	7,874
1820.....	6,054
1821.....	6,627
1822.....	8,230
And by Stationary Vaccinators, in last 5 years.....	34,275
And in the United Kingdom, as reported by Corresponding Vaccinators, in same period.....	327,521

ANECDOTES.—At the commencement of the American war, Mr. Grenville, then in power, wishing to know how the Quaker colonists stood affected, sent a message to Dr. Fothergill, intimating that he was indisposed, and desiring to see him in the evening. The Doctor came; and his patient immediately entering on the popular topic of American affairs, drew from him the information he wanted. The conversation held through a large portion of the evening; and it was concluded by Mr. Grenville's saying, he found himself so much better for the Doctor's visit, that he would not trouble him to prescribe. In parting, Mr. Grenville slipt five guineas into the Doctor's hand, which Fothergill surveying, said, with a dry arch tone, 'At this rate, friend, I will spare thee an hour now and then.'

Another of his anecdotes was this: Dr. Brocklesby, who was, perhaps, best known as the medical friend of Dr. Johnson, was, as the then Duchess of Richmond used herself to relate, sent for to see her woman, who was so ill as to be confined to her bed. In the hall he was met by the Duke's valet, who was the woman's husband, and who, either by nature or locality, was as warm a politician as the Doctor. Public affairs being then peculiarly critical, they became so interested in debate, that the patient was little thought of as they ascended the stairs; nor did the conversation relax when they reached the sick woman's chamber. In short, they both quitted the room, returned down stairs, and the Doctor quitted Richmond house, without either of them being aware that they neither of them had looked at the patient, or spoken to her, or of her. —*(Miss Hawkins.)*

War Physic.—When young men (among the Indians) are going to war, by way of preparation, they are put into a sweat house, made for the purpose, and remain there four days, and drink tea made of bitter roots. The fourth day they come out, have their knapsacks ready, and march. The knapsack is an old blanket, and contains some parched corn, flour, jerked meat, and leather to patch their mocasons. They have in their shot-bag a charm, a protection against all ills, called the '*war physic*,' or '*war medicine*,' composed of the bones of a snake and a wild cat. The traditionary account of this physic is, that in old times, the wild cat or panther devoured their people; they set a trap for him, and caught him in it; burned him, and preserved his bones. The snake was in the water; the old

people sang, and he showed himself; they sang again, and he showed himself a little out of water; the third time he showed his horns, and they cut off one of them; he showed himself a fourth time, and they cut off the other horn. A piece of these horns, and the bones of the wild cat and panther, is the great war medicine!—(*Dr. Morse's Report on Indian Affairs, Appen. p.* 100.)

LEARNED SOCIETIES.

Linnæan Society.

March 4.—The following papers were read:—

Description of the Skeleton Head of the Long-snouted Alligator of the Ganges, or *Lacerta Gangetica* of Linnæus, presented to the Linnæan Society, together with the entire Skeleton of a young subject of the same species, by Major-Gen. Thomas Hardwicke, F. R. S. &c.

Description of a Serpent hitherto supposed of the genus *Boa*, and the *Boa Phrygia* of Shaw; but which, on a more minute examination than that able naturalist had the opportunity of making, is found to be a Coluber; on which account it is proposed to refer it to that family, and to designate it *Coluber Phrygius*.

Mr. Sheppard's Catalogue of Suffolk Shells was concluded.

Mr. Brookes exhibited after the meeting, a fine living specimen of the Kinkajoo, *Viverra caudivolvula*.

March 18.—Observations on the generic character of *Locusta*, with the Description of a remarkable Species. By the Rev. Lansdown Guilding, B. A. F. L. S. &c. With figures.

Description of the Tailed Bat, commonly found in Calcutta. By Maj-Gen. Hardwicke.

Astronomical Society of London.

March 14.—The papers read at this meeting were:—

1st. On the Determination of the Resultant of two Forces or Pressures applied to a Point of Matter, by means of a functional Equation. By Dr. Meikleham, Professor of Natural Philosophy in the University of Glasgow.

2d. A Comparison of Observations made at Dublin with those at Greenwich on the Parallax of certain Fixed Stars. By Dr. Brinkley, Prof. of Astronomy, Trinity College, Dublin.

Many valuable presents of scientific books were received, in furtherance of the Library which we announced, in our last Number, that this Society was about to form.

London Institution.

A Course of Lectures by Mr. Brande on Electricity, Voltaic Electricity, and Electro-Magnetism, and a Course on Metallurgy by Mr. John Taylor, have just been concluded at this Institution. And those of Mr. R. Phillips on Chemistry, as connected with the Arts and Manufactures, and by Dr. Crotch on National and Scientific Music, are now in the course of delivery.

Asiatic Society of London.

Considerable progress has been made in the institution of a Society for the Encouragement of Literature, Science, and the Arts, in connexion with India and other countries eastward of the Cape of Good Hope, to be denominated the Asiatic Society of London. A number of gentlemen have been already enrolled as members. Among the objects of the Society will be the promotion of researches into the arts, literature and history of Asia; as well as the diffusion of various branches of European knowledge and art among the inhabitants of that continent. These labours, there is good ground to hope, may at no distant period be shared by intelligent natives of the East incited to follow up researches into their own history, literature, and antiquities, and animated by the spirit of improvement which has already begun to manifest itself among them.

TO CORRESPONDENTS.

D. R. W. W. and R. R. are received.

Sir Murias Hydrargyri is returnable; so are X *and Philo-philosop.*

The gentleman who complains against our not forwarding him the Magazine, in compliance with his request to this effect, is informed, that by giving the order to his bookseller, or the newsmen in his vicinity, he will be sure to have it regularly, at a certain period of the day of publication, commensurate with the distance.

The Publication of the MEDICO-CHIRURGICAL *and* PHILOSOPHICAL MAGAZINE, *took place last Saturday, at* 8 *o'clock A.M.*

All Letters, &c. (post paid) addressed for the Editors, at the Publisher's, &c.

London:

Printed by E. JUSTINS, 41, *Brick Lane, Spitalfields.*

Published by COX and SON, St. Thomas's Street, and 39, High Street, Southwark. Sold also by Sherwood, Neely, and Jones, Paternoster Row; Simpkin and Marshall, Stationers' Court; Callow and Wilson, Princes' Street, Soho; John Cox, Berner's Street, Oxford Street; E. Willson, Corner of Royal Exchange; Chappel, Cornhill; W. Turner, Cheapside; T. Boys, Ludgate Hill; H. and W. Smith, 192, Strand; G. Roake, 31, Strand; Sams, St. James' Street; W. Stewart, South Bridge Street, Edinburgh; and Hodges and M'Arthur, Dublin.

THE WEEKLY

MEDICO-CHIRURGICAL & PHILOSOPHICAL MAGAZINE.

No. XII.] SATURDAY, APRIL 26, 1823. [*Price 4d.*

" FLORIFERIS, UT APES, IN SALTIBUS OMNIA LIBANT
OMNIA NOS, ITIDEM, DEPASCIMUR AUREA DICTA."

Some Account of M. BICHAT'S *Theory of Life.*

(Continued from page 162.)

IT is not at all pretended that the idea of this division was entirely original with Bichat. Most physiologists have had some faint conception of it, and others have more distinctly recognised it under a somewhat different modification and with a different title. But he has made it peculiarly his own by the ingenious and novel manner in which he has stated, explained, and illustrated it; the detailed application, which he has made of it, to the various phenomena of the living system; and the beautiful and almost poetical air which he has, by means of it, thrown around many of these phenomena.

In the first place, as he teaches us, the two lives differ, in some important respects, as to the organs by which their functions are performed. Those of the animal life present a symmetry of external form, strongly contrasted with the irregularity, which is a prominent characteristic of those of organic life. In the animal life, every function is either performed by a pair of organs, perfectly similar in structure and size, situated one upon each side of the median dividing line of the body, or else by a single organ divided into two similar and perfectly symmetrical halves by that line. Thus the organs of sight and hearing, and of locomotion, are double and similar; the nerves of the brain go off in corresponding pairs; the organs of smell and taste and the brain are situated with a perfect regard to this law. The organs of the organic life, on the contrary, present a picture totally different; they are irregularly formed, and irregularly arranged; the stomach is disposed without any regard to the medium line, and one half of it bears no resemblance to the other: the same is true of the liver, the spleen, and all the organic viscera. The heart, it is true, is a double organ; but its parts are of unequal size and strength; the rest of the circulating system presents a thousand irregularities; and the lungs are dissimilar in the two sides of the thorax, in the division of their lobes, and the quantity of matter they contain.

This symmetry of the form is accompanied by a corresponding harmony in the functions of the organs of the animal life. The exactness and perfection of vision depend upon the similarity of the impressions transmitted by the two eyes to the brain; if these impressions are dissimilar, vision will be imperfect in proportion; hence we shut one eye when the power of the other is increased by the interposition of a lens, and hence we squint when one eye is made weaker than the other. The same is true of all the senses, of the muscles of locomotion and voice, and of the brain itself; if there is between the corresponding organs on the two sides, or the corresponding halves of the organs, any inequality or dissimilarity, that is, if there is any defect of symmetry, the consequence is an imperfection in their function. Upon this principle Bichat explains the difference between different individuals in their natural capacity for distinguishing accurately the harmony of sounds. A good ear

for music, as we express ourselves in common language, is only the result of the possession of two symmetrical organs of hearing, which transmit to the brain similar impressions; a bad ear, on the contrary, is produced by any inequality in the organs, which transmit two unequal impressions. Thus, when one, either of our ears or eyes, is deprived of its usual degree of sensibility, we can hear or see much better by making use of that alone, which is uninjured, than by having recourse to both. The same remark is extended to the functions of smelling, tasting, and touching, and to the functions of the brain and muscles. But nothing like this is true of the organic life, to the regularity of whose operations, harmony and correspondence of action is not a necessary condition.

The functions of the organic life are constantly going on; they admit of no interruption, no repose; whatever cause suspends, but for a moment, the respiration or the circulation, destroys life. They form a necessary and connected series, which must be always moving on in continued progression, from the beginning to the end of existence. But in those of the animal life the case is widely different. They have intervals of entire repose. The organs of this life are incapable of constant activity, they become fatigued by exercise and require rest. This rest, with regard to any particular organ, is the sleep of that organ; and in proportion to the extent of the previous exercise, and the number of organs fatigued, the state of repose will be partial or general. Upon this principle Bichat founds his theory of sleep. General sleep is the combination of the sleep of particular organs. Sleep then is not any definite state, but is a more or less complete rest of the whole system in proportion to the number of organs which require repose. The most perfect sleep is that where all the functions of animal life, the sensations, the perception, the imagination, the memory, the judgment, locomotion, and voice are suspended; and the various forms of imperfect sleep exhibited in dreaming, somnambulism, &c. are all produced by the wakefulness of some particular organs.

The two lives differ also in regard to habit; the animal being much under its control, the organic but slightly. In the animal life, habit renders our feelings and sensations less intense, whilst it elevates and perfects the power of judging. The eye is no longer sensible of the presence of objects to which it has become familiarized, the ear takes no notice of sounds that are constantly repeated, the other senses become hardened against the operation of agents which have often excited them; but at the same time the capacity for forming an accurate judgment with regard to their qualities has been growing more perfect.—Thus, a piece of music gives us at first a feeling of pleasure simply, and nothing more; if it be often repeated, this pleasure vanishes, but we become capable of estimating the merits of its arrangement and harmony. In the organic life it is not so; respiration, circulation, secretion, &c. are totally without the dominion of habit, and although some of the functions of this life, most intimately connected with those of the animal, are in some measure under its influence, yet in a general way a freedom from this influence is a distinguishing characteristic of the organic life.

Every thing relating to the understanding is the attribute of animal life; whilst the passions on the contrary belong to the organic life, have their seat in its organs, influence them when they are excited into action themselves, and are on the contrary influenced by the state of the organs. The relation which the

passions have, so remarkably, with the animal life, is intermediate, and not direct; all the primary phenomena produced by their excitement are exhibited in the internal organs; the heart is violently excited in anger, more moderately in joy; fear, sadness, grief, produce an opposite effect. The lungs are equally affected, the respiration is quickened or impeded, a sense of oppression or suffocation is brought on, according to the nature and degree of the passion excited. In various emotions we experience peculiar sensations in the epigastrium, a sharp pain, a sense of fulness or of sinking; in other cases moral decided effects are produced, a spasmodic vomiting, a copious secretion from the liver or the mucous membrane of the intestines, producing a diarrhœa. All the natural gestures by which we attempt to express the intellectual and moral affections, are so many proofs of the correctness of these views. If we wish to indicate any of the phenomena of the intellect, relating, for instance, to memory, to perception, or to judgment, we carry the hand spontaneously to the head; but if we would express love, joy, sadness, hatred, &c. we involuntary place it upon the breast, or the stomach. We say a strong head, a well organized head, to express the perfection of understanding; a good heart, or a feeling heart, to express moral perfection. Many of the phenomena of disease indicate the same relations between the organic viscera and our moral affections. In the diseases of some organs, the mind is cheerful and happy, taking always a favourable view of things, and this, even when the disease lies at the very root of existence; and on the contrary, when some other organs are affected, it is invariably gloomy and apprehensive, anticipating the most fearful results, and even in trivial complaints expecting the most fatal consequences.

(To be continued.)

Cases from the Appendix of Sir A. Cooper's Works on Dislocation, &c. &c.

(Continued from page 163.)

On Dislocation of the knee-joint.—Cases of dislocation of the knee-joint are so rare, that every case of this accident is worthy recital; and I feel greatly indebted to my friend, Mr. Toogood, surgeon, at Bridgewater, for the following detail of one which occurred under his care.

Francis Newton, a stong athletic man, thirty years old, fell from the fore part of a waggon, heavily laden with coals, and entangling his foot in the frame work of the shaft, was dragged for a very great distance before he was released. I saw him two hours after the accident. The left knee was very much swollen; the tibia fibula and patella were driven up in front of the thigh, and the os femoris occupied the upper part of the calf of the leg; the internal condyle being nearly through the skin; it was a complete dislocation, and the appearance of the limb so dreadful, that I despaired of being able to reduce it; but, to my surprise, it was more easily effected than I imgined. By placing two men to the thigh whilst I extended the leg, the man became directly relieved; the whole limb was placed in splints, and the strictest antiphlogistic treatment observed with the most perfect quiet; the symptoms were very mild, and by carefully watching him, he suffered very little inflammation or pain. At the expiration of a month, I allowed him to get up, and on the 29th of January, he came into this town, a distance of four miles, in a cart, and walked from an inn to my house, with his leg but little swollen and having some motion of the joint. He eventually recovered a very good use of his limb, and walks with so little inconvenience, that he has followed his business of a waggoner ever since, and this day, Nov. 30th, 1822, I have seen him walking by the side of his team with very little lameness.

On Dislocation of the Os Humeri.—Partial dislocation of the Os Humeri forwards.—Mr. Bachelor, of Southville, aged 36, fell from a chaise on the 12th of November, and he supposes pitched on his shoulder. On rising he could not move his right arm for ten minutes, when some sudden spasm gave him the power of moving it underhand. Inflammation succeeded, the shoulder became much swollen, with pain down the arm to the fingers, and particularly in the direction of the cubital nerve. On looking at the arm the same evening, he found that the os humeri appeared to be advanced.

It is two months since the injury, and now the hand is benumbed; there is much pain at the insertion of the biceps into the fore arm, so that he has been often obliged to rise twice during the night to put his hand in warm water.

The appearances are a projection of the acromion, and a hollow beneath it; the head of the os humeri rests against and under the corocoid process, and the scapular end of the clavicle is opposite to the middle of the head of the bone. The biceps muscle was relaxed and lessened; the corocoid process of the scapula was with difficulty felt above, and to the inner side of the head of the os humeri.

The principle of treatment in these cases is to oppose the pectoralis major by a clavicle bandage, with a broad strap over the head of the os humeri, and to bring the elbow forward to keep the head of the os humeri back.

Dislocation of the Os Humeri backwards.—A man fell from the roof of a coach and struck the point of his left shoulder against a projecting stone. He suffered little pain from the accident, but finding himself incapable of using his arm, he came immediately to the hospital.

Upon examination, I found that the head of the humerus was thrown upon the dorsum of the scapula, where it presented a considerable prominence behind the glenoid cavity, and immediately under the spine of the bone. The vacancy beneath the acromion was not so remarkable as in the axillary dislocation. The arm was closely applied to the side, and slightly inverted, the elbow being directed rather anteriorly. Free motion was permitted forward and backward, but the limb could not be raised or carried across the breast without great difficulty.

Reduction was easily effected in the following manner:—the scapula being fixed, extension was made, by means of a cloth twisted around the elbow, for about three minutes, when finding no disposition in the head of the bone to return to the cavity, although it was already in close contact with its lower and back margin, I made a fulcrum by my right hand in the axilla, and grasping the elbow in my left, readily succeeded in lifting it into its socket.—J. S. Perry.

House Surgeon's Apartments, St. Bartholomew's Hospital.

Fracture of the neck of the Os Humeri.—William Mills, aged 72, fell down during the severe frost upon his shoulder, three days after which he was admitted into Guy's Hospital. The arm and shoulder were much swollen, there was also acute pain and discolouration of the integuments; crepitus could not be felt, and from the degree of swelling, it was impossible to ascertain the precise nature of the accident.—Leeches and evaporating lotions were applied. The shoulder was again examined on the second day, after the swelling had somewhat subsided, and a fracture of the neck of the humerus was discovered. The pain and swelling again became greater, and gradually increased, the integuments inflamed, having the appearance of erysipelas, the skin became discoloured and gangrenous. He was feverish and irritable, then delirious,

and gradually sunk on the tenth day from the accident.

Appearances found on dissection.—The integuments and cellular membrane, on the inner part of the shoulder over the clavicle, were considerably thickened, having a sloughy appearance; and on cutting through the deltoid muscle, a large quantity of bloody matter mixed with serum was effused. The capsular ligament was extensively lacerated, the humerus was fractured through the cervix, also obliquely through the head, and a small spicula of bone was separated from the cervix.—JAMES MASH.

January 1823.

(To be continued.)

MEMOIR.

(Continued from page 164.)

Having thus established that the fibrous structure of the brain, or rather the appearance which gives rise to that opinion, was known to anatomists long before the days of Gall and Spurzheim, Dr. Gordon proceeds next to examine some peculiar notions of these anatomists respecting the alleged origin, termination, and uses of these fibres in composing the great mass of the brain. He remarks, that Malpighi long ago observed, that, if we proceed to describe the fibrous structure of the brain by commencing at the base, in that part called *medulla oblongata*, the whole of the fibres might there be said to originate and ramify in all directions, till they terminate at the vertex in the cortical or grey matter. A similar mode of description was afterwards employed by Reil, who states, that, if we set out from the *medulla oblongata*, all the fibres might be regarded as radiating or diverging from this point to the extremities of the nerves, on the one hand, and to the extremities of the fibres in the cerebrum and cerebellum, on the other: or, reversing the matter, all these fibres might be considered as converging from their extremities towards the medulla oblongata.

The fibres, thus described by Reil, are, in his view, *one* and the same system, and are named *Diverging* or *Converging*, according to the part from which the description begins, and consequently, according to the direction in which their course may be traced. With Gall and Spurzheim, these fibres form *two* distinct orders or systems, differing essentially from each other, not in direction only, but in origin, in termination, and in use.

We distinguish, say they, in the cerebellum and cerebrum, *two* orders of fibres—the fibres diverging, and the fibres converging. Of these orders, the first, or diverging, is said to originate from the grey or brown matter of the medulla oblongata; and, in reference to the entire brain, may be regarded as consisting of three primitive sets of fibres—one destined to form the cerebellum, and the two others the cerebrum. The former, or cerebellar set, is said to originate from grey matter in those portions of the medulla oblongata called *corpora restiformia;* and, passing respectively to the right and left hemispheres of the cerebellum, its fibres are continued through the *corpus dentatum*, till they terminate in the laminæ of the cerebellum, which they thus contribute to form. Of the two sets of cerebral fibres, the first is said to arise from the grey substance of the *corpora pyramidalia*, and, passing upward through the annular protuberance and crura cerebri, proceeds to form the convolutions chiefly of the anterior and middle lobes: while the second set, commencing in the grey matter of the *corpora olivaria*, and passing upward, behind the annular protuberance, and through the crura cerebri, are continued through the thalami optici and corpora striata, to form the convolutions of the posterior lobes, and other parts in the direction of the median line. Such are the several sets of *divergent* fibres which are said to form the greater part of the brain; and, in conformity with this notion, they are named the 'Apparatus of Formation.'

The *converging* system of these anatomists, is, in almost all respects, opposed to that which has been just described. Like the former, however, its fibres are said to originate from *grey* matter: but the place of their origin, their course, termination, and use, are altogether different. Instead of springing from a circumscribed part of the medulla oblongata, they arise, it is said, from the grey matter distributed over the entire surface of the brain; that is, they originate in that portion of those very convolutions in which the divergent fibres were declared to terminate. Commencing thus, by an expanded origin over both hemispheres, their filaments are said to unite as they proceed inward, and, crossing the opposite fibres in their course, they at length reach the median plane, where the fibres of each hemisphere, uniting with those of its opposite, produce the different parts or commissures by which the two he-

mispheres are joined. As the fibres of this system, from their alleged origin to their termination, are said continually to *converge*, they have been denominated the *converging* system; and from their supposed termination in the parts which connect the two hemispheres of the brain, they derive the appellation of the 'Apparatus of Junction or Re-union.'

Of these two alleged fibrous systems, Dr. Gordon declares the greater part to rest only on hypothetical assumptions, or on descriptions which have no prototype in nature; that the small portion of truth they contain has been long known to anatomists, and that the later investigations of Reil into the fibrous structure of the brain, are not only more minute and elaborate, but their results at variance, in every particular, with these conjectural statements. He affirms generally, that the origin of any of the fibres of the brain from the grey matter of the medulla oblongata, is a mere assumption; that, with regard to the cerebellum, in particular, no fibres can be traced from the *corpora restiformia* into the *corpora dentata*, as these anatomists assert; that the said corpora dentata are not masses of grey substance, but consist of a small quantity of white matter contained in a brown capsule; and that the alleged formation of the laminæ of the cerebellum, by fibres emerging from the corpora dentata, is altogether destitute of proof. In his public dissections, Dr. Spurzheim, it is said, did not attempt to demonstrate this last piece of structure; nor have he and his colleague ever ventured to delineate it in any one of the seven engravings of the cerebellum which accompany their large work on the Brain.

Next, with respect to the *divergent* fibres of the cerebrum, it is maintained, that the alleged origin of the *first* set from the *grey* matter of the pyramidal bodies, and their augmentation or 'reinforcement' from similar matter in the annular protuberance, and crura cerebri, are quite hypothetical; for that very little of such grey matter exists in any of those parts: that the superficial eminences, called corpora pyramidalia, cannot be considered equal to the production of so much nervous matter as this description implies; that, instead of augmenting in their passage through the annular protuberance, the fibres of the pyramidal bodies are considerably less at the upper part than in the middle of that protuberance; and that the final distribution of these fibres in the grey matter of the convolutions, is a statement wholly incapable of demonstration.

(To be continued.)

Observations on Phrenology as affording a systematic View of Human Nature.

(Continued from page 165.)

The accuracy of the facts and observations made by Drs. Gall and Spurzheim must, however, be refuted or confirmed by experience alone, and we have pursued this line of argument merely to shew that their mode of enquiry is not only reasonable, but highly philosophical and worthy of attention—that if the accuracy of their observations is confirmed by those of future enquirers, it will advance the philosophy of mind with a certainty and success far greater than have hitherto attended the efforts of its most devoted cultivators. Certainly there appears little deserving of ridicule or contempt in such views of this highly important subject. We wish therefore to excite the spirit of enquiry, that the foundation and successive additions to the new science may be carefully examined, and that their correspondence or disagreement with nature may be ascertained and made known before we definitively either adopt or reject it.

Mr. Abernethy, in an especial manner, recommends them to the attention of the medical profession, as probable in themselves, and teeming with the most important results. Our author, in his preface, says, that he was one of the "many who treated the doctrines of phrenology with disregard, if not with contempt and derision. His opposition did not proceed from conviction arising from any examination, but rather from an ignorance of what they truly were, and a general impression of their being absurd, heterodox, and irreconcilable to the principles of true philosophy."

Some articles in favour of phrenology, which appeared in the New Edinburgh Review, excited his attention, and induced him to examine the standard works on phrenology. In the course of this enquiry, it appeared to him that the prevailing opposition to the new doctrines was at

least as much owing to misapprehension of their importance as to any doubt of their truth. He therefore conceived that—

"If it could be shown that this system (of philosophy) is a reasonable one, and that it is conformable to analogy, and to the order of nature in other instances—that it accounts for the phenomena in a perspicuous and beautiful manner—that every part of it tends to some useful end, and that the whole is well connected and consistent with itself; such a demonstration, could it be accomplished, would afford a kind of internal evidence of the truth of the system, which would go far to remove the *aversion*, with which it seems at present to be regarded by many of the most intelligent and scientific in this country," and "the following pages contain the substance of an attempt to elucidate the subject in this way."

In another place (p. 46.) he remarks—

"I am sensible I have not treated the subject in the manner a phrenologist would have done. Taking his stand upon the high ground of facts, and firm from the conviction arising from experience, he will probably feel no addition to his faith from any arguments drawn from other sources, and may regard as needless any attempts to support the system by probable reasoning, or what he may consider fanciful and wire-drawn analogies. But there may be minds so constituted as to be affected by such arguments and analogies, and which require to be invited to the study of the facts by such means."

Our author first discusses the probability of the brain being an assemblage of different organs, each having for its function the operations of an individual faculty. He says—

"If different parts of the brain are destined to different purposes, where is the absurdity of supposing, that certain separate portions of the brain are more intimately connected with, and more closely subservient to, different individual functions of the mind, than any other part? If this be so, it may appear to us a very curious and wonderful provision; but it is no more absurd or inconsistent with reason, than that different organs are appropriated to the use of the different senses—that the eye is connected with, and subservient to, the sense of vision, the ear to that of hearing, and the tongue to that of taste. The only difference is, that in the one case the organs are more open to observation, their configuration is more mechanical, and more obvious to our gross and imperfect powers of observing—but in the principle itself, that the different powers may have different portions of the brain assigned to them, connected with and subservient to them, and by means of which they act and manifest themselves, there is no absurdity whatever. *It may perhaps not be true*—that is a different matter, and must be decided by observation and experience; but it is quite conformable to reason and analogy to say, *that it may be so.*"

(To be continued.)

PHYSIOLOGICAL OBSERVATIONS

ANIMAL PHYSIOLOGY.

(Concluded from page 167.)

The food passing along with the water through the gills, is received by an opening at the bottom of this cavity, which opening is the real mouth, leading to the œsophagus and stomach. All the digestive organs are contained in a second cavity, distinct from the first. There is also a third cavity, in which the heart and its investing membrane, or pericardium, is situated. Between the general integument, covering all these parts, and the mantle, a large space is left, which is filled with a watery fluid.

The Salpa is a genus of which many species are remarkable for the strangeness of their shape, and for the singular evolutions which they practise when swimming: arranging themselves sometimes in a close phalanx, or forming radii around a common centre; and at other times deploying into one long line, which, as they are phosphorescent animals, appears in the night as a long streak of fire. The union of the Botryllus is still more curious, for they are united permanently in a radiated arrangement, and have an organic or vascular communication, like the tribes of aggregated polypi described in a former lecture. In the Pyrosoma, the individual animals compose, by their union, the sides of a large hollow cylinder, open at one end, but

closed at the other; and the whole mass is carried forward in the sea by the combined contractions and dilatations of the individual animals which compose it. The Polyclinia resemble still more, in their arrangement, the aggregated Polypi, being entirely fixed to the same spot; and the vital organs of each individual being imbedded in a gelatinous mass common to the whole cluster, and through which communicating vessels pass between the adjacent animals. Their structure is essentially the same as that of the Ascidia. For the discovery of this interesting fact we are indebted to Savigny.

Dr. Roget proceeded to detail the expedients resorted to by this order of Mollusca for effecting various kinds of progressive motion, especially by the employment of that organ which has been termed the foot. By means of this instrument many shell-fish advance slowly along the surface of rocks; others burrow in mud or sand at the bottom of the sea; and others are even enabled to perform leaps to a considerable distance. The flexible tubes, which, being extended to the surface of the sand, while the animal itself is at some depth beneath, enable it to be supplied with water for the purposes of respiration, were described: as also the curious mechanism by which the muscle moors itself to rocks by means of threads, which are cast, in a canal, formed into a groove, at the root of the tongue.

The order of Gasteropoda, which comprises all the univalve shell-fish, exhibit a more refined organization than the Acephala. They have a head distinct from the body, on which are situated tubular and retractile tentacula, on the extremities of which are often placed minute organs of vision. The lower part of the body is formed into a muscular disc, by the undulations of which the animal crawls slowly on the surface of objects. Some, as the Snail and the Slug, respire atmospheric air, which is admitted into a separate cavity for that purpose, and the entrance to which cavity can be opened or shut at the pleasure of the animal. Many curious facts were stated relating to the reviviscence of Snails, after the lapse of many years, and to their power of reproducing the head after that part has been removed.

The order of Pteropoda comprises a few genera, in which the organs of motion, as well as of respiration, have the form of membranous oars, situated, like wings, on each side of the neck. The Clio Borcalis, which belongs to this order, is found in prodigious numbers in the Arctic Ocean, where it constitutes the chief food of the whale.

The Cephalopoda enjoy a great extension of the faculties of sensation and powers of locomotion, when compared with all the other tribes of Mollusca. They are characterised by having a distinct head, furnished with large and perfect eyes and organs of hearing, and by numerous tentacula with a multitude of suckers, surrounding the aperture of the mouth. The jaws have exactly the shape of the beak of a parrot. The digesting apparatus is very complex, and the stomachs numerous. There are three hearts, two bronchial, and one aortic, provided for carrying on the circulation. The Cuttle-fish tribe have an internal shell. The Nautilus, Argonaut, &c. have an external one. The latter of these animals have broad membranous expansions, which they employ as a sail while floating on the surface of the sea.

Dr. Roget concluded this lecture with a detailed account of the processes employed by nature in the formation of Shell. The principal circumstances relating to this curious subject were investigated by Reaumur; and an account was given of some of his experiments on the reproduction of the shell of the Garden

Snail. The mode in which successive layers of shell are deposited, so as to constitute the two pieces of bivalve shells, and the spiral turns of turbinated shells, and the building up, in some instances, of partitions, so as to divide the cavity of the shell into a number of separate chambers, were severally explained.

POISONING BY OXALIC ACID.

(Continued from page 171.)

The following conclusions were drawn from a variety of observations and experiments made to the following purpose; viz. to ascertain whether the preceding effects can be attributed to a sympathetic impression conveyed by the nerves from the stomach to distant organs;—to shew that oxalic acid acts through the circulating medium;—that whatever be the tissue to which it is applied, whether it be introduced into the stomach or intestines, or injected into the peritoneum, pleura or cellular substance, and that the symptoms it induces are the same in general character;—whether the acid could be discovered in the circulating fluids, and what effect it might have upon them, as well as the nature of its action while still circulating in the vessels, &c. &c.

Conclusion 1. Oxalic acid, when introduced into the stomach in large doses, and highly concentrated, irritates or corrodes it, by dissolving the gelatin of its coats; and death takes place by a sympathetic injury of the nervous system.—2. When diluted, it acts neither by irritating the stomach, nor by sympathy, but through the medium of absorption upon distant organs: and, *cæteris paribus*, it acts much more rapidly when diluted than when concentrated.—3. Though it is absorbed, it cannot be detected in any of the fluids, because probably it undergoes decomposition in passing through the lungs, and its elements combine with the blood.—4. It is a direct sedative. The organs it acts upon through absorption are the spine and brain primarily, and the lungs and heart secondarily: and the immediate cause of death is sometimes paralysis of the heart, sometimes slow asphyxia, and sometimes a combination of both."

Under the second head of this enquiry, viz. the application of the experiments to poisoning in man, the symptoms, morbid appearances, treatment, and its relations to medical jurisprudence are considered.

Symptoms.—"None of the poisons in common use are so rapidly and so unerringly fatal. The rapidity of the poisoning has depended chiefly on the quantity taken, and the length of time it remained in the stomach. The first symptoms are, in every case, immediate burning pain in the stomach, and sometimes too in the throat. Violent vomiting in general follows either instantly or in a few minutes, and continues till near death; but in two cases* there was none, and in another† it was exceedingly slight. These three all died within half an hour. The vomiting how immediate soever it may be, does not always afford much chance of recovery. A woman who swallowed two ounces, though she discharged it instantly, died twenty minutes afterwards.‡ The matter discharged has been commonly dark, and in two cases sanguinolent, which accords with what we have often witnessed in animals. Death generally happens too soon for gastritis to appear. The bowels have seldom been much affected. The signs of depressed circulation have always been very striking. The pulse, in every case, became imperceptible; and, even in those who recovered, it could not be felt for several hours. The state of the pulse has naturally

---

* Stated in the Med. Rep.

† *Ibid.*

‡ The solution was highly concentrated, the acid having been dissolved in three parts of water.

been always accompanied with deadly coldness, clammy sweats, and sometimes lividity of the nails of the fingers. Most of the patients had strong symptoms of disorder of the nervous system. The two who recovered complained much of nervous numbness and tingling of the extremities long after the more violent symptoms had gone off: two others became insensible before death; and four were affected with convulsions either at the time of death, or a short while before it."

MORBID APPEARANCES.—"The examination of the dead bodies, though in general conducted judicially, are both very deficient and exceedingly discordant, yet many of the apparent contradictions may be reconciled, by attending to the circumstances under which the poison acted; and without doubt they might be so reconciled, had the authors been more precise in their phraseology, and more minute in their descriptions."

"A reddish froth sometimes issues from the mouth and nose. In one case there was a good deal of general emphysema ten hours after death. No other mention is made of the external state of the body, except in one case, in which it is said to have been natural and without ecchymosis. The brain has been rarely examined. In one case the cerebral vessels were turgid; in another there was some effusion under the arachnoid;—appearances probably independent of the disease. The state of the lungs, heart, or blood, is never alluded to. The stomach, and even the intestines, are, in these cases, said to have been inflamed externally; but as the term inflammation is given without a detail of the actual appearances, it cannot be admitted into the account, especially as, in some careful dissections, no such appearance was observed. The stomach generally contains a quantity of fluid, sometimes thick and viscid, commonly dark, like coffee grounds, and these probably consisting of extravasated blood altered by the poison, such as we have found in animals killed by the concentrated acid."

"The state of the membranes of the stomach has been very different in different cases. In a girl who died about thirty minutes after swallowing an ounce of acid, no morbid appearance whatsoever was found in any part of the alimentary canal; yet she scarcely vomited. It must be presumed, though the circumstances are not mentioned, that the acid was much diluted, and the inspection made soon after death. On the other hand, in a girl who died fifteen minutes after swallowing six drachms, the inner coat of the œsophagus peeled off easily; the rugæ of the stomach were pultaceous, and easily wiped off; the other membranes were tender, and, in some parts, perforated, so that the contents had escaped from the stomach, and had even attacked the spleen. This description is easily accounted for;—the girl did not vomit, and the examination was put off for three days."

"The precise appearance that may be expected in the membranes will be more particularly noticed, when the evidence to be derived from them, is to be treated of."

TREATMENT.--"Little knowledge has yet been acquired of the treatment of this kind of poisoning; for, in truth, it is commonly beyond the controul of art before medical aid can be procured. Yet neither the chemical action, nor the absorption of the poison is so rapid, as not to be obviated by the prompt employment of certain remedies. The first object of the practitioner in all cases of poisoning is to remove the deleterious substance from the stomach. In the case of poisoning with oxalic acid, however, it may be inconvenient or even dangerous to attempt this by ordinary means. For, first, as to emetics, either the vomiting is so speedy and continual that they are

unnecessary, or it is never properly accomplished; in which case emetics will too often fail of their effect; besides, during the time lost before their operation, the acid would in general have acted long enough to prove eventually fatal. And, then, with regard to simple dilution, so advantageously used to promote vomiting in most kinds of poisoning, we have seen that it promotes the absorption of oxalic acid; so that it could not be safely used, unless there was a certainty that it was to be followed by vomiting. Lastly, the method lately proposed of withdrawing liquid poisons from the stomach by a tube and exhausting syringe, might be improperly applied to oxalic acid; but it should be remembered, that the great rapidity of its action requires a remedy more easily and generally attainable. Antidotes are of two kinds. Some change the chemical nature of poisons before their action begins; others impair or destroy their energy by a counter-action on the system. The substances proposed to alter the chemical nature of oxalic acid are, the alkalis, chalk and magnesia.

(To be continued.)

Dr. Heyting's *Case of Chronic Inflammation of the Pancreas.*

A woman, aged 30, pale, thin, and subject to profuse perspiration, applied to Dr. Heyting in May, 1820. She had been safely delivered two months before of a healthy child; but had afterwards been seized with a violent fever, which still continued. She was affected with a profuse and disagreeable salivation. Her mouth and throat were natural, so that the cause of this salivation was not in the salivary glands; but as there was occasionally found in her stools matter similar to that of the salivation, it was thought it might come from the primæ viæ. She had immoderate thirst, but no liquid would remain on the stomach. The perspiration was so abundant, that the bed-clothes had to be changed five or six times a day. She had regular evening exacerbations of the fever. There was also acute pain of the left side, with dry cough, palpitations of the heart, and a feeling of oppression and uneasiness about the stomach. The abdomen was soft, though considerably tumified. The urine was scanty, with brick-dust depositions. Dr. Heyting decided from those symptoms, that the source of the disease lay in the pancreas, and prescribed the following draught:—℞. Acidi muriatici oxyg. ℥j; Mucil. Gum. Arab. ℥ij; Aquæ Canellæ sine Vino. ℥v. Tinct. Thebaic. ℈ss. Sacchari Albi q. s. M. Capiat cochleare unum quaque hora.—This prescription was successful; for in eight days the salivation, the diarrhœa, and the perspiration abated. The dose was gradually augmented, and followed by tonics, and the cure was completed.—*(Hufeland's Jour. der praktischen Heilkunde.)*

Dr. John Hume *on Tartar Emetic Ointment and Tonics in Phthisis. (Communicated by the Author.)*—I am desirous of adding to my remarks on phthisis, published in the Quarterly Journal for January last, a short sketch of a case, most probably of incipient tubercular phthisis, which at present is in a fair way of terminating favourably.

G. R. a man in his 29th year, by trade a weaver, was, in April, 1822, attacked with hæmoptysis. He had for some days previously, felt himself unfit for his work, he was weak and languid, and lost his appetite. He had a sense of oppression and weight over his chest, and a severe cough as if he had caught cold, and some pain near the lower end of the sternum. When the hæmoptysis appeared, he went to a surgeon in his neighbourhood, who took a plateful of blood from his arm, and desired

him to return in a few days and lose as much more if the hæmoptysis continued. In the meantime, a lady desired him to consult me. When I first saw him on the 25th of April, besides the above symptoms, he had feverish paroxysms occurring daily, for the most part after mid-day; his pulse was 100, and of moderate strength, his tongue rather redder than natural, and his bowels costive. His cough was very severe, and his expectoration frequently bloody, but sometimes of a purulent appearance. I ordered a large blister to be applied to his sternum, gave him a mixture which contained laudanum, digitalis, and tartrate of antimony, and to obviate costiveness the compound rhubarb pill. By the 1st of May the hæmoptysis had disappeared, but the cough was still severe, and the fever had not abated. Bowels were still costive. I now put him on the use of the tartar emetic ointment, one drachm to an ounce of lard, to be rubbed over his whole chest, and the following mixture for his cough:— ℞. Mel. ℥ij; Theriac ℥ii; Acet. Distill. ℥iiij; Tinct. Opii. dr. i; Aquæ ℥xii; M. Of this he was to take a table-spoonful occasionally, according to the violence of the cough. I recommended also exercise in the open air, particularly the swing, and I put him upon a milk diet and animal soup, which he was enabled to procure, by the goodness of a family in whose neighbourhood he resided. Under this management he continued for a great part of the summer, with a fair promise of recovery; to which the antimonial friction certainly contributed, as he used it to a very great extent. In August last, however, from accidental exposure to cold, he had a recurrence of his hæmoptysis slightly, and for two days after its appearance he spit little round substances like pin heads, of a dull white colour, and in considerable quantity. I did not see him at that time, but he got the same pectoral mixture as formerly, and persevered with the antimonial ointment. This man has got through a very severe winter wonderfully well, his house being situated in a sheltered valley, and at present he is almost free from complaint. His father and uncle, I am informed, died of consumption. He himself is of a fair complexion, naturally well coloured, and, in short, has somewhat of a strenuous appearance. His recovery must be attributed, in a great measure, to the ointment; for certainly never mortal persevered with such ardour in the use of any remedy. His diet and exercise were tonic, but nothing else. It is intended that, in future he shall abandon his sedentary employment, and betake himself to one that shall keep him on his legs, and more in the open air. He still uses the ointment.—I may here observe that my approval of Dr. Stuart's practice, is occasioned by conviction, and not by the partiality of friendship; for I have met him once only, since the year 1797, at which time we were both attending the Medical Society of Edinburgh.

I have had a case this winter, of a very severe cough, and particularly expectoration, with little or no fever, which terminated favourably, in consequence of vomiting being brought on, by the patient having taken too much of a compound squill mixture. The vomiting continued for some days; and was not relieved till the patient had his chest and epigastric region rubbed repeatedly with laudanum and camphorated spirit, and took a pill containing 3 grains of calomel and one third of a grain of opium every four hours, till the bowels were freely evacuated. This medicine was given in consequence of green bilious matter being vomited. The vomiting never returned, and the cough soon abated; the patient's appetite and strength very speedily re-

turning. Previous to the vomiting, the case had a very unfavourable aspect, as the constitution, without doubt, was disposed to phthisis. To prevent misconception, I wish it to be understood, as my opinion, that phthisis, meaning, of course, scrofulous or tuberculous phthisis, may be cured by tonic remedies, if the disease be in an incipient state, and if proper precautions be employed at the same time; but that, if the disease be far advanced, no treatment whatever will cure it.—*(Quar. Jour. of For. Med. and Surg.)*

Dr. CHAPMAN *on the internal use of Lead.*—In one of our last numbers, we alluded to the use of the saccharum saturni in several of the affections of the bowels. We have for many years occasionally employed it both in cholera infantum, and dysentery, though never to the same extent, or with as much success, as during the present season. These two diseases have prevailed in this city in a very unusual degree for the last month, which has afforded us ample opportunities of testing the powers of the medicine. Evacuations having been premised, by venesection and purging, we have found no one remedy more effectually to relieve tormina and tenesmus, to correct the morbid secretions of the intestinal tube, to allay febrile excitement, or to conduce to the comfort, and general improvement in the condition of the patient. These remarks apply especially to dysentery, though in the cases of cholera infantum approaching the same character, we have derived nearly equal advantage from it. To an adult we give half a grain to a grain of the lead, with five drops of laudanum, every hour or two, according to the urgency of the symptoms, either in solution or pill. In some instances, where we were desirous of acting on the surface, we have added a small portion of ipecacuanha, with utility, to the preceding prescription. It meets exceedingly well this particular indication, without at all impairing the specific properties of the lead. In the progress of some protracted cases it will be necessary about once in the twenty-four hours, to intermit this course of treatment, in order to interpose some purgative, to remove any foul accumulations, which may take place in the bowels. By whom this practice was originated we know not with certainty. It has been vaguely spoken of, and we suspect, as loosely tried for many years among us. We have, however, reason to believe that the credit is due to Dr. Irwin, of Charleston, South Carolina, one of the most intrepid, original, and accomplished physicians of our country.

The intermittent fever, which so widely prevailed during the last autumn in the neighbourhood of this city and elsewhere, has again recurred, and, for the most part, with great obstinacy. In many instances, it is attended with a singular irritable stomach, so as to preclude the use of bark, and the ordinary remedies. We have found such cases sometimes to yield to emetics, repeated for three successive times, on the days of the anticipated paroxysm. There is another practice which has proved very successful under similar circumstances. It is to keep the patient in bed for several days, repeating a dose of opium every six hours, so as not to allow the impression of that article to wear off.--*(Chapman's Jour.)*

MELANGE.

Dr. REISSEISEN *on the Structure of the Lungs.*—In an essay on this subject, our author was considered equal to Sömmerring, who was at the same time candidate for a prize offered by the Berlin Academy. He proved, contrary to Helvetius, and in some degree accorded with F. Meckel, that the lungs are a very minutely divided extension of the

trachea, the branches of which gradually lose their cartilaginous portion as they divide, and continue their course till they end, not in cellular membrane, but in a simple membranous cul de sac. Over this a vascular plexus is spread, arising from the bronchial arteries, out of which the pulmonary veins at once spring; and of course the arterial blood is mixed with the venous blood. The bronchial veins, again, do not form a trunk, but open separately into the pulmonary veins, which return the blood to the heart. He thinks he has demonstrated, in opposition to Haller, that the lungs are well supplied with nerves, not from the intercostal, but from the pneumo-gastric; and he denies all anastomosis *in the lungs* with the eighth pair. He considers the state of collapse as the natural state of the lungs.—*(Saltzburger Zeitung Med. Chir.)*

Mr. Henry Earle *on the Mechanism of the Vertebræ.*—In birds, the mechanism of the spine, and the spinal canal, is so contrived as to allow a remarkable extent of motion in the neck, without the medullary column suffering from pressure. It is a very singular fact, that in birds, the cervical vertebræ are numerous; but that the number varies from nine to twenty-four, while among mammalia, there are uniformly seven, except in the three-toed sloth. He exemplifies this in the short-necked mole, in the horse, and in the giraffe, whose neck is, we believe, about four feet long.—*(Phil. Trans.* Pt. II. 1822.)

Dr. Horner *on a New Muscle in the Eye.*—A muscle has lately been discovered, by W. E. Horner, M.D. Ass. Prof. Anat. University of Pennsylvania, situated at the internal commissure of the eyelids, on the posterior part of the lachrymal ducts and passing from the flat surface of the os unguis towards the puncta lachrymalia, which has a curious and interesting influence on the position and functions of the puncta and of the eyelids.—(*Chapman's Jour.)*

Dr. Prout *on the Chemical Changes of the Chick in Ovo.*—This accurate chemist has proved or rendered probable by numerous experiments, that in the earlier stages of incubation, an interchange takes place between an oily matter in the yolk, and a portion of the albumen; which portion of albumen becomes somewhat like the curd of milk, while a portion of the watery and saline parts of the albumen mixing with the yolk, augment its bulk. As incubation proceeds, these watery and saline parts again separate from the yolk, and diminish its volume. In the last week of the process, the phosphorus of the yolk is found in the chick, converted into phosphoric acid, united with lime, constituting the bony skeleton; which lime does not exist originally in the recent egg, but is derived from some unknown source during incubation.—*(Phil. Trans.)*

Mr. Henry Earle *on the Pathology of the Spine.*—Dissections have proved to Mr. Earle, that the most distressing nervous symptoms, and even complete paraplegia, may be produced, by adhesions taking place between the membranes of the spinal marrow, (whose freedom of motion is essential to health) and by effusion into the canal, or theca. Affections of the dorsal vertebræ, he found to be much more serious, and more early manifested with respect to spinal disease, than of the cervical or lumbar, chiefly, as it appears from the difference in the capacity of the canal.—*(Phil. Trans.)*

M. Malatides *on Congenital Diseases.*—M. Malatides, in his "Tractatus de Otalgia," thinks that congenital diseases may often arise from external injury, such as pressure, blows, and oftener still from imprudent venery; in proof of which he gives a case of an infant, who had been struck on the head from such a cause, "Vir valide in gravidæ ventrem impegit," and when born, the part was livid, and the child had con-

genital cophosis.—(*Reidlin. Curar. Med.*)

Professor CALDWELL *on Inoculation of Measles and Plague.*—Notwithstanding what has been said by Home, our author believes that measles cannot be communicated by inoculation at all. He has often tried the experiment with the blood, the tears, the mucous of the nose, the saliva, and the eruptive matter, mixed with water—totally without effect. He believes, though he has not tried, —that the same remarks apply to plague, which he denies to be contagious, and thinks that in cases where inoculation has been tried, the patient has caught the disease, not from the incerted matter, but from the epidemic cause.—*(Philad. Jour.)*

Dr. GÖDEN *on the Seat of Puerperal Fever.*—According to the observations and dissections of Dr. Göden, the most prominent morbid appearances in puerperal fever are seated in the serous membranes. He found that the phenomena were by no means confined to the peritonæum; but were obvious also in the pleura, the pericardium, the pia mater, and the arachnoid. This, we think, is of considerable importance, if it be confirmed by subsequent observation; as it will assist us in accounting for many of the anomalous symptoms. We must confess, however, that we are somewhat sceptical as to the sweeping generalization.--*(Hufeland's Journ. der Heilkunde.)*

PHRENOLOGY. — On Thursday evening, the 17th of April, 1823, a cast of the head of Mrs. M'Kinnon, was laid before the Phrenological Society. It was contrasted with casts of the heads of a clergyman and of a female of virtuous dispositions, and the differences were striking; in the last two, the larger portion of the brain was perceived to lie before the ear,(indicating an ample developement of the intellectual organs) and the coronal surface of the head (the seat of the organs of moral sentiments) was also observed to be largely expanded; in the cast of Mrs. M'Kinnon's head, on the other hand, the larger portion of the brain was visibly situate behind the ear, the forehead was low, and the coronal surface comparatively narrow, indicating a great preponderance of the animal organs over those of the moral sentiments and intellect. — *(Edinburgh Paper.)*

THE CHARIOT OF ANTIMONY.

Basil Valentine, who lived towards the end of the fifteenth century, published a singular work, which he called "*Currus Triumphalis Antimonii.*" Valentine ranks among the first who introduced metallic preparations into medicine; and is supposed to be the first that ever used the word antimony. In his "*Currus Triumphalis Antimonii,*" after setting forth the chemical preparations of that metal, he enumerates their medicinal effects. According to the prevailing custom of the age, he boasts of supernatural assistance; and his work furnishes a good specimen of the controversial disputes between the chemical physicians, and those of the school of Galen; the former being attached to active remedies, and the latter to more simple and inert remedies. Valentine's "Chariot of Antimony," opens with the most pious exhortations to prayer and contemplation, to charity and benevolence. But the author soon forgets himself, and breaks out in the following strain of virulent invective:—"Ye wretched and pitiful medicasters; who full of deceit, breathe out I know not what! Thrasonick brags! infamous men! more mad than Bacchanalian fools! who will neither learn nor dirty your hands with coals! you titular doctors, who write long scrolls of receipts! you apothecaries, who, with your decoctions, fill pots, no less than those in princes courts, in which meat is boiled for the sustenance of some hundreds of men! you, I say, who have hitherto been blind, suffer a collyrium to be poured into your eyes, and permit me to anoint them with balsam, that this ignorance may fall from your sight, and that you may behold truth as in a clear glass! "But, says Basil Valentine, after proceeding in this strain for some length, I will put an end to my discourse; lest my tears which are continually falling from my eyes should blot my writing; and whilst I deplore the blindness of the world, blemish the lamentation which I would publish to all men."

MEDICAL AGENCY,

At COX and SON'S MEDICAL LIBRARY, St. Thomas's Street, Borough.

THE object of this Establishment is to facilitate, upon the most equitable terms, and without delay, the disposal and procuration of MEDICAL PRACTICES—formation of Partnerships—procuring ASSISTANTS and Apprentices for every branch of the profession, &c. &c. Further particulars may be had, by applying either personally or by letter (post paid) as above. Hours of attendance from 10 to 12 on Mondays, Wednesdays, and Fridays.

N. B. A SMALL BUT IMPROVABLE MEDICAL PRACTICE, a short distance from Town, in a populous neighbourhood, to be disposed of—house rent and taxes under £30—To any gentleman of small capital, desirous of establishing himself, the above offers a favourable opportunity. Apply at the MEDICAL AGENCY OFFICE, St. Thomas's Street.

SMELLIE'S Large Folio Plates of Midwifery.

A few copies of this work, containing Forty Engravings, illustrative of the Practice of Midwifery, with explanations, are offered to the Medical Profession, *at One Guinea each, being only half the publishing price.* Gentlemen desirous of procuring a copy of the work, are requested to make application to Messrs. Cox, St. Thomas's Street, Southwark; of whom may be had, in small size, a selection from the above, with descriptions. Price 5s. Also,

Dr. HUNTER'S Thirty-four Large Plates of the Human Grand Uterus, atlas folio. Price £5 5s. bds.

NEW MEDICAL MAGAZINE.

Part I. and II., price 2s. each, of the MEDICO-CHIRURGICAL AND PHILOSOPHICAL MAGAZINE, containing a selection of original cases, and a variety of interesting information relative to the science of medicine, &c. and illustrated by views of the Royal College of Surgeons, Guy's Hospital, Gall and Spurzheim's Craniology, &c. &c.

*** This work is continued in weekly numbers, at fourpence each.

MARRIED.

On Tuesday last, at Clapham, Sarah, the daughter of the late Dr. Clark, of the Island of St. Dominica, to J. B. Touray, Esq. Surgeon and Apothecary.

OBITUARY.

On Friday, 11th instant, at his residence, Begbrook, near Bristol, Robert Lovell, M.D.

On the 14th inst. at his house in Berner's Street, the wife of Dr. Fanthorn.

TO CORRESPONDENTS.

The anonymous paragraph left with us last week relative to a work on the uterine nerves, is an advertisement, consequently does not come, in its present state, within the ordinary range of our literary enquiries, &c. unless paid for as such.

We have been favoured with an hospital case, sufficiently interesting for our notice, but unfortunately it is without either name or date; as soon, therefore, as these two important indications are fulfilled, it will come under our immediate consideration.

The communication signed "a BRUNONIAN" *is returnable.*

We beg leave, in reply to TYRO-MED. *to state that we cannot countenance the animadversions, or rather the reflexions, he has favoured us with: we are friends to all parties, "and influenced by none." Moreover, we are decidedly of opinion, that no such jealousies, &c. exist, between* MAZE POND *and any of the* BOROUGH ESTABLISHMENTS, *as those to which he alludes; they are unworthy of cultivated minds, and, at least, can only vegetate in the creative fancy of some little genius fostering an imaginary* esprit de corps, *which, more especially in the pursuit of science, must ever prove a bugbear to rational improvement. The paper is returnable.*

PHILO-JUSTITIA *in a forthcoming number.*

Communications, advertisements, &c. &c. addressed for the Editors, at the Publishers, &c.

London:

Printed by E. JUSTINS, 41, *Brick Lane, Spitalfields.*

Published by COX and SON, St. Thomas's Street, and 39, High Street, Southwark. Sold also by Sherwood, Neely, and Jones, Paternoster Row; Simpkin and Marshall, Stationers' Court; Callow and Wilson, Princes' Street, Soho; John Cox, Berner's Street, Oxford Street; E. Willson, Corner of Royal Exchange; Chappel, Cornhill; W. Turner, Cheapside; T. Boys, Ludgate Hill; H. and W. Smith, 192, Strand; G. Roake, 31, Strand; W. Sams, St. James' Street; W. Stewart, South Bridge Street, Edinburgh; Hodges and M'Arthur, Dublin; &c. &c.

THE WEEKLY

MEDICO-CHIRURGICAL & PHILOSOPHICAL MAGAZINE.

No. XIII.] SATURDAY, MAY 3, 1823. [*Price* 4*d*.

" FLORIFERIS, UT APES, IN SALTIBUS OMNIA LIBANT
OMNIA NOS, ITIDEM, DEPASCIMUR AUREA DICTA."

*On Somatopsychonoologia.** *By* ANTI-PHILOSTRATUS.

AFTER the very masterly work of Dr. Barclay on Life and Organization, a work which is equally honourable to him as a scholar, a critic, and a christian, I did not expect that we should have heard more on the subject. A writer, however, under the signature of Philostratus, has thought expedient to revive it, under the plea of considering himself as one of those included by the advocate of the Hunterian doctrine of life, under the opprobrious term *the party*. Whether this were the case or not, I cannot pretend to say; but it has furnished the learned author with an excuse, after an interval of six years, for giving to the world his physiologico-material opinions. This he has done in a thin octavo, under the sesquipedalian title of Somatopsychonoologia.

As this work contains nothing that is new, the observations I shall have to make on it will not be many, and I shall endeavour to be brief. I shall pass over Philostratus's theology, taking leave only to observe, that I presume he was bred a catholic, as he calls the reformed churches little protestant *heresies*, and as he considers the pretended (why pretended?) reformation as the main cause of our diminished expectations of a future state, our spiritual darkness, our lax morality arising out of Calvin's blasphemous doctrines, (query, did he ever read Calvin's Institutes?) and of our forgetfulness of the groundwork of faith and hope in the church. These and other theological matters I shall leave to be combated by a second Rennell or Grinfield, should they think them deserving of notice. I shall leave untouched every thing relative to organology, notwithstanding the information of Dr. Forster's having recently discovered a new cerebral organ, which the learned Doctor has designated by the euphonous name of the " organ of mysterizingness!" All these I consign to the able correspondent of Christopher North, Esq. whose argumentative essays in some recent numbers of Blackwood's Magazine, the craniologists, cranioscopists, organologists, or whatever they choose to term themselves, would do well to peruse.

In section the first, the author talks of an obscure school of anatomy in Windmill Street. Having been educated at that school, though it is some years since I have had any communication with it, I cannot but feel some interest in its honour. What! is the school where that accomplished scholar, that excellent anatomist, that most eloquent lecturer, Dr. Hunter, where the concise and accurate Baillie, the diffuse Cruikshank, the plain and unassuming Wilson, lectured, and where that surgical phenomenon, John Hunter, began his brilliant career, now shrouded in

* Somatopsychonoologia; showing that the proofs of body, life, and mind, considered as distinct essences, cannot be deduced from physiology, but depend on a distinct sort of evidence; being an examination of the controversy carried on by MM. Laurence, Abernethy, Rennell, and others. By Philostratus. 8vo. London, 1823.

As this work is anonymous, the author of these remarks on it considers it unnecessary to affix his name to them.

obscurity? Do not Mr. Charles Bell and Mr. Shaw understand anatomy? or is it that they are too much of Englishmen, too much like Dr. Barclay, to contaminate their lectures with the cheerless and pernicious materialism of French philosophers and French physiologists?

In section the second, the author says, that in contemplating the order of things, we should unavoidably be lulled into a belief that the material atoms of the universe contain within themselves the cause of their own phenomena, were it not for what we are taught in our childhood, that a spiritual Being caused and supports the whole.

To suppose that any person would believe that material atoms could of *themselves* originate animal and vegetable organisms, possessing life and perception, is an opinion too absurd, we should think, even for a physiological materialist. It would be to give to those atoms design and intelligence. But what absurdity is there that such philosophers will not maintain? Tell them that the mind must be something different from matter, and that the Deity is not to be confounded with the universe, they answer you, like the mathematician, who, after perusing the Iliad, replied he found nothing proved, there are no proofs. We want, say they, something visible, something tangible. With respect to mind, we see nothing but the cerebral mass, and what is that mass? An assemblage of material atoms, and mind is only the agitation or motion of these atoms. Then, as to that Being you term God, he too is inaccessible either to the sight or touch. All that we behold are the sun, stars, and planets, the earth on which we live, with its various animals, vegetables, and minerals. But wonderful and beautiful as are these animals and vegetables, those revolving planets, those brilliant stars, they afford no proofs of a Being distinct and different from the universe: there is nothing, therefore, but the universe.

In the next section, the author examines Mr. Abernethy's doctrine of life and mind, and affirms, that these two supposititious existences, for so they are termed, have never been discovered, that physiology goes not farther than organization, and that they cannot fairly be deduced from physiology.

If the author mean, that the living principle and mind have never been seen and handled, no one, I believe, will dispute the point with him; but if he mean, that they cannot be fairly and legitimately *inferred* from the phenomena, then I must deny the position, because the phenomena cannot otherwise be satisfactorily accounted for. We are told, indeed, that the cause of these phenomena, as well as the resistance to putrefaction, are certain affinities between the particles of living bodies, constantly in play while their functions are performed; and when these cease, they become subject to other affinities more powerful, which are chemical affinities. In answer to this circuitous mode of explaining things, it is enough to ask, what is the *cause* of these affinities, and the susceptibility of the corporeal particles to this play?

In the last section, the author, after telling us in a note that Paley was a bad anatomist, considers his inference, that as on finding a watch we should infer a watchmaker, so, on contemplating the universe, we are led to believe in an Omnipotent Artificer, to be bad reasoning; because, he says, we infer, that a watch had a maker, solely from the experience that such instruments have been made by watchmakers, but that we have had no experience that worlds were made by God.

Now, if I rightly recollect Paley's statement, there is no more of experience in the one case than in the other. In the first, the hypothesis

is of an Indian finding this watch, and upon examining its mechanism, inferring that it could not have *made itself*. Why, in the second, then, the situations being similar, are we not to infer, that the universe, with all its wondrous mechanism, had, like the watch, a maker? I shall be told, perhaps, as the Systême de la Nature tells us, that the universe is not a work, and exhibits no marks of design; to which I reply, the difference between the watch and the universe is that the former is a work of *human* design, the latter that of *Divine* design.* The author continues, and also informs us, that though Paley was no ignoramus (prodigious!) yet that he was a great gormandiser, had often eaten a whole shoulder of mutton at a meal, and that, as a learned physician has proved that a light vegetable diet clarifies the intellect, it was owing to his inordinate meals that he stopped short of those piercing and ethereal coruscations of genius displayed by the late Percy Bysshe Shelley!!

How unfortunate for their country, and perhaps the world, that Paley and Johnson (for Johnson too was a gormandiser) should have been so partial to animal food! Had a light vegetable diet clarified their intellects, instead of the common-place puerile morality of the Rambler, and the inconclusive evidences of the Natural Theology, we should have had the refined and liberal morals of the Queen Mab, and the strong proofs of a belief in a Deity, as they stand recorded in the Album! How unfortunate, let me repeat, and how yet more unfortunate, that the majority of their countrymen should so much resemble them! The savoury sirloin and grateful shoulder still smoke on their tables. Notwithstanding, therefore, the exception of a few herbivorous individuals, the learned physician, the anti-Newtonian knight, perhaps Philostratus himself and their followers, we must, as a nation, be considered as eminently carnivorous; of consequence, how extensive, how profound soever may be our researches into nature, we can arrive no farther than this absurd, this unphilosophical conclusion, that a God exists.—*(London Med. Rep.)*

* See Estlin's sermon on atheism, in which the sophistry of such writers as Diderot, Depuis, and his follower Volney, is ably refuted.

Some Account of M. Bichat's *Theory of Life.*

(Continued from page 179.)

The two lives differ also in the mode and epoch of their origin. The organic is in activity from the very first period of conception; the animal enters into exercise only at birth, when external objects offer to the new individual means of connexion and relation. In the fœtal state, the œconomy is solely occupied in the formation and nutrition of the organs; this is the preparative stage of existence. The organs, which are to perform the functions of the animal life, are created and perfected, but they are not exercised; they are not accessihle to the operation of the agents whose excitement is necessary to bring them into action, and of course they remain in a state of profound repose, until the stimulus, first of the air, and afterwards of food, light, and sounds, is applied to the appropriate organs. At birth, then, a great change takes place in the physiological state of man. His animal life is first brought into existence, and his organic life becomes more fully developed and more complicated, in order to accommodate itself to the increased demands which this change necessarily brings upon it. But from this moment, there is no further alteration or improvement in the functions of the organic life.

They are as perfect in the infant as in the adult, they are not susceptible of education. But in those of the animal life every thing depends upon the education they receive; at first feeble, imperfect, indistinct, they gradually become developed, and the direction given to this developement, and the character which they ultimately possess, depend in a great measure upon the influence exercised upon them by extrinsic circumstances.

Differing thus in their origin and in their mode of developement, the two lives differ also in the mode of their termination in death, when this takes place naturally, that is, at the extremity of old age. The animal life is becoming gradually extinguished, before the organic has begun to fail. One after another its functions cease to be performed. The eye becomes obscured, it ceases to feel or to transmit the impression of light. The ear becomes insensible to the impulse of sound. The skin, shrivelled, hardened, deprived in part of its vessels, is capable of but an obscure and indistinct sensation; the parts dependent upon it, the hair and beard, lose their vitality, grow white, and fall off. The intellectual functions follow in the train of the sensations, the perception is blunted, the memory fails, the judgment becomes infantile; and at the same time the muscles under the influence of the brain, viz. those of locomotion and voice, partake of the same decrepitude. The old man moves with pain and difficulty, and speaks with a thick and trembling voice. 'Seated near the fire which warms him, he passes his days concentrated within himself; estranged from every thing around him, deprived of desires, of passions, of sensations, speaking little, because induced by no motive to break silence, happy in the feeling that he still exists, when almost every other one has already quitted him.' In a certain sense then the animal life dies first, and leaves the organic still going on in the performance of its functions; this separation is more or less complete, and continues for a greater or less length of time, in different cases. The old man may continue to breathe and digest, for some time after he has to all intents and purposes ceased to think and to feel; he continues to exist as a vegetable, when he no longer lives as an animal. Death, however, at length seizes upon the organic life. Gradually, and step by step, the vital forces desert the different organs; digestion, secretion, &c. languish, the circulation and respiration are successively impeded and finally stop.

In considering the vital properties, as in all his inquiries concerning life, Bichat had constant regard to his grand division into the two lives; and he recognises in the functions of each life, the exhibition of properties peculiar to itself, or at least properties modified by the nature and relations of that life to whose functions they are subservient. In the organic life, the organs have in the first place a sort of sensibility or perception, by which they become acquainted with the presence and qualities of the substances applied to them; this is the *organic sensibility;* they have then a property by which they react upon these substances, and excite in them motion; this is the *organic contractility.* It has two modifications. 1. Where the contraction is insensible, as in the exhalants, capillaries, secreting vessels. 2. Where it is sensible, as in the heart, the stomach, the intestines, and these are called respectively, the *insensible,* and the *sensible, organic contractility.* In the organs of the animal life, there is also a sensibility, by which they are not only made capable of receiving the impression of an object and its qualities, but of transmitting that impression to the common sensorium: and a contractility, which not only renders a part

capable of contracting, but is in the exercise of its power under the entire control and direction of the brain. These properties are called the *animal sensibility* and the *animal contractility*.

(To be continued.)

MEMOIR.

(Continued from page 182.)

Proceeding next to the *second* set of divergent fibres, it is maintained, that their alleged origin from the grey matter of the corpora olivaria is altogether inaccurate; for, like the corpora dentata, those bodies consist of a firmly indented capsule of brown matter, containing a nucleus of pure white substance; that though Drs. Gall and Spurzheim affirm, that a strong fasciculus of fibres comes out of these bodies, yet they have nowhere shown at what part these fibres emerge, either in their plates or public demonstrations; that the alleged union of these fasciculi with others of the medulla oblongata, and their ascent behind the posterior boundary of the annular protuberance, is quite imaginary, and altogether inconsistent with the statement of their passing between the transverse fibres of that body; and that the subsequent progress of these fibres through the thalami optici and corpora striati, receiving reinforcements in their course, and finally terminating in the convolutions of the posterior lobe, is purely hypothetical, and wholly indemonstrable.

Lastly, with reference to the *history* of this particular fibrous structure, it is observed, that the passage of the fibres of the pyramidal bodies through the annular protuberance into the peduncles or *crura cerebri*, was known to, and described by Vieussens, Morgagni, Petit, Vicq d'Azyr and Haller; and was again more minutely detailed by Reil in 1795; and further, that the connexion between the peduncles and the hemispheres was also known to several of the anatomists above-mentioned, and, more lately, was successfully prosecuted by Reil, who, in 1809 and 1812, published the final results of his investigations in two Essays, illustrated by engravings, remarkable for their clearness and accuracy. 'I have compared both these papers with 'nature,' says Dr. Gordon, 'and am satisfied that Reil has left little for his 'successors, either to correct or to discover, in this department of the anatomy 'of the brain.'

'To these valuable dissertations, however,' continues Dr. Gordon, 'not the 'least allusion is made, either by Dr. Gall 'or his partner, in any of their writings. 'And yet the Essay in Gren's Journal for '1795, was published thirteen years before 'these gentlemen presented their Memoir '(which is their first composition) to the 'French Institute, and five years at least, 'I presume, before they were even heard 'of as anatomists in Europe. Again, Reil's 'Essay in the Archives of Physiology for '1809 (to say nothing of the paper for '1812) which contains the most complete 'description of the Brain-Proper, was 'published a year before the appearance 'of Drs. Gall and Spurzheim's *quarto* work 'in Paris; four years before the composition of their Essay for the Dictionnaire 'des Sciences Medicales; and six years 'prior to the publication of Dr. Spurzheim's separate book on Physiognomy. I 'will not do Reil the injustice to insinuate, 'that Drs. Gall and Spurzheim have borrowed their views, without acknowledgment, from him. Had they adopted the 'descriptions of that accurate inquirer, 'the present pamphlet would have been 'unnecessary. But it is surely not unreasonable to have expected, that some 'reference should have been made to the 'writings of an anatomist, who has the 'sole merit of having revived the investigation of the fibrous structure of the 'brain in modern times; and who, by pursuing steadily the only method by which 'that enquiry can be satisfactorily conducted, has obtained results, at variance, 'in every particular, with those conjectural statements, which, by writing, and 'by travel, these gentlemen have been 'labouring for years to establish.'

But hypothetical and erroneous as the description of the *Divergent* system of fibres has been shown to be, it is affirmed by Dr. Gordon, that the account given of what has been denominated the *Convergent* system, far exceeds it in error, and is, in truth, altogether imaginary and false. He maintains that no fibres, answering to their alleged system, can be shown to come out from the *grey* substance of the convolutions of any part of the brain, as these anatomists assert; that such a structure is purely hypothetical, and wholly at variance with the real structure of these parts, as unfolded by the investigations of Reil; that these anatomists themselves admit, that they can follow these two systems as 'distinct and visible fibres,' only in the posterior convolutions of the middle lobes of the cerebrum, where, however, it is said to be just as impossible to demonstrate them, as in any of the other convolutions; and, accordingly, says Dr. Gordon, 'when 'Dr. Spurzheim was called upon, in his 'public dissections here, to make good

'those affirmations which constitute the 'leading features of his system, by tracing 'any of the divergent fibres into the grey 'substance of the convolutions, and dis- 'tinguishing them from the converging 'filaments in the same part; he was under 'the necessity of denying that he had ever 'affirmed any such structure to be demon- 'strable.' Equally imaginary, Dr. Gordon affirms, is the alleged progress of these convergent fibres, from the convolutions towards the inner part of each hemisphere, there to form, by uniting with the fibres of the opposite hemisphere, the various connecting parts, denominated, in this system, Commissures of the brain. 'It thus 'appears,' continues Dr. Gordon, 'that, 'under the denomination of Diverging and 'Converging fibres, Drs. Gall and Spurz- 'heim have described, and described im- 'perfectly or inaccurately, parts of the 'brain long known to anatomists;—that 'they have represented as demonstrable, 'and even delineated in their engravings, 'parts which have no existence in this 'organ; and lastly, that they have main- 'tained connexions to subsist betwixt all 'these parts, for which there is no foun- 'dation in nature.'

(To be continued.)

Observations on Phrenology as affording a systematic View of Human Nature.

(Concluded from page 183.)

He then proceeds to discuss the nature of the powers of the mind to which the different organs are respectively subservient, and the situation of the organs as given by Drs. Gall and Spurzheim. In looking over the list of faculties in order to try if he could reconcile it to reason and analogy, he could observe no order or connexion between them.

"The whole presented to me a rude appearance, quite different, as I then thought, from what is commonly found in nature. After a more attentive consideration, however, light began to dawn upon me, and beginning to consider the faculties in a certain way, and to group them after a certain order, the whole gradually formed themselves before me into a system of surprising symmetry, and, like the disjointed parts of an anamorphosis when seen from the proper point of view, collecting themselves under one elegant design, delighted me with the appearance of that very order and beauty which I would before-hand have expected to find in them."

The harmonious junction of the organs, the beautiful adaptation of the faculties to each other and to the phenomena of mind as observable in every state in which it exists, are, he says, far too remarkable, and the coincidences are far too numerous and exact, to have occurred by chance.

"As soon would a number of letters shaken out of Swift's laputan machine fall of themselves into the order of a scientific treatise, as that the names of thirty-three faculties, put down at random, should compose a complete and well combined scheme of the human mind, such as this appears actually to be. The inference is, I think, irresistible, either that the scheme which appears so well arranged has been invented by the ingenuity of Drs. Gall and Spurzheim; or, if they actually proceeded in the manner in which they tell us, and formed it piecemeal by a gradual and patient examination of facts, that the harmony and systematic junction of these scattered members forms a very strong presumption (to say no more) in favour of the accuracy of their separate observations, and of the system being truly founded in nature."

Our author observes in addition that—

"Had Drs. Gall and Spurzheim sat down with the purpose of constructing a system from their own imagination, it is next to morally impossible that they could have contrived one which harmonized so completely with itself, and with the actual state of the human faculties, and the uses to which these faculties are subservient. This is a problem which has puzzled the most eminent philosophers of ancient and modern times; and all attempts to solve it have hitherto been fruitless, so as almost to entitle us to conclude that its accomplishment is beyond the reach of human ingenuity. If, then, these gentlemen had actually succeeded in inventing a system like this, which affords a key to the mental constitution of man, and a facility of accounting for the diversities of human intellect, and human character, far surpassing any other system that ever appeared—supposing it to be, as all former systems have been, entirely hypothetical—it would entitle the authors of it to rank as philosophers along with the highest names which have ever adorned the annals of the world."

This our readers will think would be strong language even from a convert; but coming from one who has

only a half acquaintance with phrenology, not having observed the facts on which it is alleged to rest, and who from his own statement came to the enquiry with his mind prepossessed against it, what are we to think? surely there must be a greater air of probability about the system when taken as a whole, than one would be apt to suppose from the disjointed statements and anecdotes with which the public have been long entertained. The author before us is clearly of this opinion, since he has published for the sake of stimulating to farther enquiry.

"I am not aware," says he, "that any such connected view of this system has been given as the above, or that the mutual relation, and dependence of its different parts have been brought forward exactly in the light in which I have endeavored to place them. The argument may not strike every one as strongly, but to me I own it appears to have considerable weight. It goes, at least, the length of inclining me to examine the facts in which the system is said to be founded, and of removing any positive dislike to it, or hardness of believing it on reasonable evidence."

Cases from the Appendix of Sir A. Cooper's Works on Dislocation, &c. &c.

(Continued from page 181.)

Compound Dislocation of the Os Humeri at the Elbow Joint.—William Dowson, aged 13, was admitted into the accident ward of Guy's Hospital on the 5th of November, 1822, at twenty minutes past seven o'clock in the evening, with compound dislocation of the elbow-joint, occasioned by a cart in which he was riding, being overturned and falling with great violence upon the elbow of the left arm.

The appearances were as follows: the condyles of the humerus were thrown inwards through the skin; the articulating surface receiving the sigmoid cavity of the ulna, being completely exposed to view; the ulna was dislocated backwards, and the radius outwards; the lateral and capsular ligaments were torn asunder, with extensive lacerations of the parts about the joint, but the artery and nerve remained perfectly free from injury.

By the kind assistance of Mr. Key, the reduction was easily effected in the following manner. The humerus being firmly grasped above its condyles, making that part a fixed point, we gradually extended the fore arm from the position in which it was, (at right angles) and the parts returned to their relative situation, but upon slightly moving the fore arm, the parts became displaced as before; but the reduction was effected a second time as above described, and in the semiflexed position the arm was dressed with adhesive plaster, and a pasteboard splint put on, previously dipped in warm water, so as to give it pliability in order to adapt it to the form of the part; a roller was then applied, and a sling was attached to the wrist and conveyed round the neck, by which means he was prevented from moving the arm from the posture in which it was placed. He was then laid recumbent, with the elbow resting on a pillow, and the evaporating lotion of our Hospital used, to keep the parts constantly moist and cool. I saw him during the night, and found him generally composed, aad that he had slept. Early the next morning he was free from pain, his pulse 112; he experienced much thirst during the day, without any other unpleasant symptoms, except some tension of the parts, by no means considerable; on the following morning, there being some symptoms of inflammation, accompanied with pain in the head, I drew from the right arm ten ounces of blood, which appeared to relieve him; in the evening of the same day he was restless, and complained of great thirst; small quantities of barley water were given to him, and in the evening three grains of hydrag. submur. He slept during the night, and on the following morn-

ing the pulse had risen to 121; and febrile action appearing, the julepum ammon. acet. was given to him every three or four hours, and in the evening his pulse had fallen to 109; he complained of darting pains in the shoulder, and his bowels being in a constipated state, I gave him 3 ℥ of ol. ricini, and two hours afterwards he had a copious evacuation, from which he felt easier and much relieved, and he passed a good night. On the following day I found him free from pain and much better. The next day (Sunday) he complained of slight pains in the upper arm, accompanied with a small discharge from the wound. On the following day he was better, pulse 105, and on Tuesday the discharge had increased, but on the three following days it decreased, when I ventured to dress the wound; the granulations were extremely healthy, the parts appeared to be well adjusted, leaving only a small sinus, by which means the discharge escaped. It was again dressed as at first, with the exception of the splint; the lotion was discontinued, the parts being perfectly cool, and the tension much reduced, The bowels being confined, the ol. ricini was repeated, which procured him two stools. On the following day he complained of pains in the shoulder, the discharge was again increasing, but on the four following days he proceeded well; the pulse varying from 98 to 109. On the sixth day from the first dressing I again dressed the wound, the granulations were rather prominent but healthy, and it was dressed with straps of soap cerate during the six following days; he continued to get better, but on the seventh day from dressing the wound the second time, some inflammation appeared, and the lotion was renewed, the discharge at this time was very slight; on examining the part, an abscess had formed upon the external condyle, which I relieved in a day or two after by the lancet; the quantity of matter discharged was about ℥ij. but quite healthy. The next day he was much better, and from this time until the 24th of December he continued improving, on which day he was able to leave his bed and walk about the ward: by great attention to the use of passive motion, he is now enabled to move the joint to a considerable extent.—Samuel White, *Dresser at Guy's Hospital.*

I frequently witnessed the progress of this case with the greatest pleasure. A. C.

(To be continued.)

POISONING BY OXALIC ACID.

(Continued from page 187.)

"There is always a material objection to the use of alkalis for neutralizing acid poison; namely, they cannot be taken in large quantity without injuring the œsophagus, or even the stomach, if they are given in excess in poisoning with oxalic acid the alkalis on stronger grounds; for we have found that the neutral alkaline oxalates, though they do not corrode the stomach, act through absorption with a force little inferior to that of the acid itself. The activity of these salts is conformable with a law very general, if not universal, though hitherto, we believe, unnoticed by toxicologists, viz. a poison acting through the medium of absorption has its action impaired, but neither destroyed nor altered in its soluble chemical combinations.

"The next antidote proposed for oxalic acid is chalk. Mr. Thomson found, that the oxalate of lime occasioned no inconvenience to animals in the dose of two drachms; and that chalk given after the dangerous symptoms had begun, speedily removed them, and restored the animals to health. The effect is evidently owing to the insolubility of the oxalate of lime.

"On the same principle it was to be inferred that magnesia would be

an effectual counterpoison, since its oxalate is very little soluble. At all events, it is highly probable, that, in man, magnesia, though an effectual antidote when administered early, will, like other antidotes, be of little use after the delay of a few minutes.

"On the second class of antidotes, those, namely, which destroy the energy of poisons by a counteraction on the system—little need be said. For, although it was to such remedies that the name of antidote was at first given, we now know that few instances of this kind really exist; and no such antidote is known for oxalic acid.

"Under this head, however, we may, with propriety, consider certain remedies, internal as well as external, which though not complete counterpoisons, have nevertheless proved useful in removing or allaying the symptoms. On the whole, it appears, from the remarkably depressed state of the pulse, and the little risk of subsequent inflammation, that the most promising treatment would consist in the vigorous employment of stimulants. This plan has been successfully followed in the two cases of recovered already recorded. In both, after the use of chalk or magnesia, small doses of opium were administered, and the vomiting soon became less violent. One of them took brandy with advantage, and the other experienced much relief from frictions and hot fomentations. For this last remedy the warm bath may most properly be substituted. The propriety of employing the most powerful and diffusible stimulants may be questioned. We were anxious, however, to try the effect of ammonia or æther upon animals; but accident has prevented us from making the experiment. Meanwhile, since there is nothing to contra-indicate their employment, and several circumstances shew that the most active stimulants may be useful; and hence the cases are generally so desperate, that any rational treatment is allowable, we may venture to recommend that they be submitted to trial."

(To be continued.)

Case of Poisoning by Corrosive Sublimate. By William Buchanan, Esq. *Member of the Society of Apothecaries, &c. &c.*

Being hastily requested to visit J. G., who was suspected of having taken poison, I did so, and found him with his mouth half open, from which he was in vain endeavouring to get rid of a quantity of ropy mucus—his lips and tongue were whitened, and having somewhat of the appearance which a sore puts on when washed with a solution of nitrate of silver, my first impression was, that this substance had been swallowed. His countenance expressed much anxiety, and his hands, placed over his stomach, suggested that it was the seat of severe pain. He refused to give any account of the cause of his symptoms, but considering I had sufficient evidence of poison, and not choosing to waste time in inquiry, I determined on exhibiting a solution of sulphate of zinc. Of this, partly by entreaty, and partly on compulsion, he swallowed in the course of ten minutes about six ounces, containing four drams of the salt: he now acknowledged that he had taken a quarter of an ounce of sublimate. Copious vomiting, which soon came on, was encouraged by as large draughts of milk and water as we could prevail on him to swallow; but the pain and difficulty in deglutition, arising from the swollen state of his mouth and throat, would have rendered all our entreaties useless, had not the greater and almost intolerable pain at his stomach compelled him to avail himself of every means of relief. In the short intervals which were allowed to take place between vomiting and swallowing, we learned from him, that he had been so determined on self-destruction, as to have taken, twice that morning, what he thought

sufficient for the purpose. He had swallowed what he had obtained on asking for sublimate two hours previously, but finding no effect (from which it is evident something else had been dispensed), he had applied at another shop for a like quantity, a quarter of an ounce, which was unfortunately given genuine, and in crystals. He took the whole of the first dry, that is, alone and unmixed, and attempted, by pouring it from its wrapper, to take the second in the same way: of this he had taken much more than half, but although he endeavored to swallow it hastily, the taste, and the instant effect on the mouth and throat, prevented his taking the last portion, which was left in the paper and thrown down the closet, to which he had retired for the pupose of taking it. Vomiting was kept up for several hours by the solution of sulphate of zinc, and, in addition to the milk and warm water, he took frequently the white of an egg. The pain at the stomach continued to be very severe, as well as the heat, swelling, and soreness of his mouth and throat; the difficulty of swallowing was very great, and the pain produced by it very much greater than any occasioned by the act of vomiting, and perfectly independent of it. It seems necessary to remark this, as it has been objected, that the quantity of sulphate of zinc used, nearly an ounce in the whole, was more than could be necessary: but after the first action of it, the effect was easily re-produced, and I saw no comparison between hazarding a somewhat inconvenient effect, which could subside when we pleased, and running the risk of the retention of any of the oxymuriate. I may make, should it be necessary, the same excuse for having given the whites of eighteen eggs, and several pints of milk and water. In such a case we ought not to be sparing of remedies. In the course of the evening he took three ounces of castor-oil, and had several evacuations. He also continued his draughts of milk and albumen. The pain of the stomach, though still severe, was more tolerable; that of the throat was still urgent, rendering articulation indistinct, and almost threatening suffocation. He continued the use of his diluents; all his complaints were gradually subsiding; and, after forty-eight hours, he was so far recovered that he went home to his friends in a distant part of the town. Since that time I have not seen him, but have learned that at the end of a week he was quite recovered. I should have stated that no salivation attended his recovery, or any other symptom indicative of the absorption of mercury. He is in person athletic, about twenty years of age, by business a gold-beater, and having sometimes occasion to use oxymuriate of mercury, he knew it as a poison. The only importance to be attached to this case, is so far as it confirms the value of early, copious, and continued vomiting, and the effect of albumen as the best remedy against such parts of this poison as may not have been rejected.—*(Lon. Med. Rep.)*

Finsbury Terrace, April 13th, 1823.

Case of Poisoning by the Œnanthe Crocata, (the Hemlock Dropwort). By Drs. BRY *and* REVEILLE-PARISE.

M. Bry, of Angers, has communicated to the Society of Medicine of Paris, a case of poisoning by the œnanthe crocata. An individual, aged forty, in perfect health, partook of the root of this plant, mistaking it for the other species of the same genus, which are edible. He had taken a piece as large as his finger. A few minutes afterwards he complained of a great heat in the throat and œsophagus; and within half an hour he lost his speech, fell into a state of insensibility, afterwards into violent convulsions, which

continued for three hours, and terminated in death within the space of four hours from the ingestion of the root, without it having been possible to render him any assistance, owing to the firmly clenched state of his teeth. The body, which was not allowed to be inspected, exhaled a very disagreeable odour fifteen hours after death. The parts of generation were, at that period, of a violet colour; the colour of the rest of the surface was unchanged.

On the Vermifuge Properties of Samphire, (Crithmum Maritimum). By Dr. LAVINI.

Dr. Lavini has published, in the twenty-fifth volume of the Memoirs of the Academy of Sciences of Turin, chemical and medical researches on the *crithmum maritimum*. He attributes to this plant very active vermifuge powers, especially in cases of the lumbrici. He prescribes internally either the expressed juice or its volatile oil, in the form of an *oleosaccharum*, given in a little water, or in any other vehicle; and externally, a cataplasm of the bruised leaves laid upon the epigastric region, while the volatile oil is kept at the nostrils.

The different experiments of M. Lavini with this plant lead him to conclude—1. That, whenever it is to be used in medicine, its juice ought to be simply expressed, without heat, that it may not be deprived of its green, mucous, and aromatic matter, which appears to contain its active principle.—2. That the hydrochlorates, the sulphates, the carbonates of the earths and potash, with the acetic acid, and a small portion of silica, appear to be constituents of the plant.—3. That it contains a free acetic acid and a peculiar extractive substance.—4. That its distilled water produces no action on the animal economy.—5. That the action of sulphuric acid converts its volatile oil into a substance resembling petroleum.—6. That the hydrates of potassa and soda do not form soaps with its essential oil.—7. That this oil is in many points analogous to petroleum; and, 8. That the plant seems to be an excellent vermifuge.—*(Archives Gen. Mars*, 1823.*)*

Case of Constipation, occasioned by a Stricture of the Colon at its Sigmoid Flexure, terminating fatally.

"On the 3d of Feb. 1823, I was called (Samuel Henry Sterry, Esq.) upon by Mr. Joseph Barton, ætat. 44, who complained of occasional abdominal pain, chiefly confined to the umbilical region, which seemed to be of a colicky nature; and as the bowels had not been relieved more than once during the day, I ordered him a dose of calomel with ext. colocynth. that evening, and a draught for the morning with sulphas magnesiæ and infusum sennæ."

This, it appears, only produced one evacuation; and as the patient complained of a disposition to sickness, some blood was abstracted from the arm, and another lenitive draught ordered him, which produced only one motion—the draught was repeated at intervals night and morning. The symptoms continued to return at intervals, without the appearance of any constitutional disease. In fact the complaint resisted carthartics of every description, bleeding, blistering, the ol. crotonis Tiglij, oleum terebinthinæ, hydrargyrum purificatum, &c. under the superintendence of Sir A. Cooper, Drs. Maton and Walshman.

Sir A. Cooper having considered it a case of intersusception, advised the constitution to be moderately supported, under the idea that the invaginated portion might slough, and by this means produce a favourable termination. It was observed, that the vomiting which was constant from Tuesday the 11th, till the evening of

Thursday the 13th, did not return until within a few hours prior to his dissolution, and that the head was never effected during the illness.

"The body was opened by Mr. Sterry, jun. in the presence of Sir A. Cooper, Mr. Callaway and myself, when the following appearances presented themselves, viz.—on opening the abdomen, all the intestines, excepting the rectum, were found exceedingly distended with air, insomuch that it was found very difficult to cut through the peritonæum without doing injury to the intestines. Wherever the intestines were in contact with each other, red lines from the adhesive inflammation, marked their disposition to unite. The derangement which produced death was situated at the upper part of the rectum; the sigmoid flexure immediately above it was much distended, and the cœcum enormously enlarged. At the termination of the sigmoid flexure of the colon, and at the beginning of the rectum a stricture was found completely encircling and obstructing the intestines, which was very much ulcerated. This was the cause and the *sole* cause of the impediment to the passage of his motions, and of the fatal issue of the case.—The inner coat of the intestine was also thickened and had a carcinomatous appearance!—no material quantity of the quicksilver was discovered, except in the small intestines, where a small portion was found adhering to the inner coat; the whole of the alimentary canal, however, was so loaded with a prodigious quantity of fermented matter, that it would have taken up more time than, under the particular circumstances of the case, was admissible, in order to arrive at any certain conclusions respecting the quantity of that substance actually contained in the different portions of the intestinal tube. —*(Med. Repos.)*

Grange Road, April, 1823.

MELANGE.

On the Absorption and Exhalation of Azote during respiration.—Dr. Edwards, who is well known as an intelligent physiologist, concludes, from different experiments, and from the circumstance of the opposite results which they give, some indicating a diminution of the azote of the air, others an increase of it during respiration, that this gas is absorbed into the circulation, and afterwards discharged from it; and that each of these actions is regulated by the constitution, habit, and circumstances of the individual, and by the influences to which he may be subjected, the absorption being to a small extent, while the exhalation is considerable, and *vice versâ*. This subject will come under a fuller consideration in our next proemium.—*(Journal de Phys. Jan.* 1823.)

The state of the Venous Trunks in Serous Infiltrations of the Extremities.—M. Bouillaud has observed, in several cases of infiltration of the lower extremities, the venous trunks, after entering the pelvis, quite impermeable, and filled by a concrete and organized coagulum. In the case of a female, who died from chronic peritonitis and scirrhus of both ovaria, with immense infiltration of both the lower limbs, the veins, near their opening into the cava, were, in a manner, obliterated by the pressure of the diseased ovaria, and completely filled, from their junction with the cava, with a carnified and friable coagulum. In another female, aged 38, who, soon after her confinement, had great œdema of her left lower extremity, and who some time afterwards died, on dissection the veins of that limb were found to be filled with a similar coagulum to that of the former case, which extended to the vena cava. The other veins were in their usual

state. The iliac portion of the colon was distended with a large mass of indurated fæces, which pressed on the adjoining veins, and gave rise to their impervious state, and to the infiltration of the limb. These observations were made in a Parisian hospital.—(*Jour. de Phys. Jan.* 1823.)

Dr. Ranken *on the Epidemic Cholera of India.*—This is the disease of which Dr. Tytler has published a nosological description, under the name of *morbus oryzeus*, or the rice disease. The symptoms very much resemble the effects of poisons, such as depression and atony of the general system, and accumulation of blood in the central trunks, producing irritation and derangement of the organs of digestion.—*(Edin. Jour.)*

Dr. John Davy *on Adhesions and Coagulable Lymph.*—On injecting brandy between the lungs and pleura of a dog, firm and long adhesions were formed in twenty-four hours. This is against the received doctrine of adhesions being weak in proportion to their recentness. When blood is drawn its albumen is liquid, but soon becomes viscid, and at length solid. When in its viscid state, it may be drawn out into transparent fibres, and bands which soon become opaque and solid, and attain their maximum of strength in a few hours. This furnishes a key to the natural history of adhesions. Dr. Baillie has committed a mistake on this point in his Morbid Anatomy, chap. 1.—*(Phil. Trans.)*

Dr. Craigie *on the Morbid Influence of the Heart on the Brain.*—The celebrated Malpighi, it is well known, was affected with a complicated disease of the heart and of the brain, and several other cases of a similar kind, particularly one by Heberden, *(Transac. Coll. Phys. Lond. V.)* are on record, but the close connection of such diseases seems not to have been much attended to. Dr. Craigie having met with several cases of this kind, has concluded, that ossification and other organic diseases of the heart, from impeding and retarding the return of the venous blood, tend to produce cerebral extravasation, causing paralysis, apoplexy, coma, and death. He at the same time allows, that cerebral disease, may arise "*spontaneously*," or, in other words, that he is ignorant of the causes. Dr. Craigie very justly censures those who, on the dissection of an apoplectic subject, content themselves with opening the cranium, and never dream of examining the heart and viscera.—*(Edin. Jour.)*

Dr. Arvend's *Cases of Ligature of the external Carotid, and external Iliac Arteries.*—Cases of this kind are rapidly multiplying, and the bold surgery of England is making its way even to the barbarous regions of the North. Dr. Arvend, principal surgeon to the Hospital of Artillery in St. Petersburgh, has related two cases in the Imperial Conservator, in which he severally passed ligatures round the external iliac, about two inches below its exit, and upon the right carotid, an inch above the clavicle. Both operations were successful. Both patients were about the same age of forty-four. The ligature of the iliac canal came away on the sixteenth day, that of the carotid on the seventeenth.—*(Salzburger Zeitung, Med. und Chir.)*

M. Renaud's *Case of Gastrotomy.*—A young man accidentally swallowed a silver fork, eight inches in length, in consequence of which the most threatening symptoms ensued, and the greatest alarm was entertained. M. Renaud, an able surgeon at Romans, (department of the Drôme,) with a view to afford the only assistance in his power to the patient, undertook the operation of gastrotomy; which he performed in the presence of several physicians of the faculty of medicine of Paris and Montpelier, and succeeded, with much dexterity, in extracting the fork. The

young man is considered out of danger, and was expected to recover in a short time.—*(Tab. Univ.)*

Observations on Aphonia. — I have seen four cases of this complaint in the course of the year, (1818); three in females, of some months continuance, and one in a man, which had continued four months. I am acquainted with a widow, 50 years of age, who has been troubled with this complaint at times for several years. Sometimes she loses her voice for six months together, and it will then return suddenly, without taking any remedy. This complaint seems to arise from want of proper secretion in the parts which form the voice, as the patients generally complain of dryness and roughness in those parts, particularly towards evening. I have seen very good effects in this complaint from a linctus, consisting of two scruples of the nitrate of potass, combined with one ounce of the rob, or extract of the elder berries. I directed a teaspoonful of this mixture to be dissolved slowly in the mouth and throat three or four times a day. As the complaint was not complicated with any other disease, but consisted in loss of voice only, these cases may not perhaps be improperly called cases of Aphonia Simplex.

Case of Poisoning by the Solanum Dulcamara. By Dr. SCHLEGEL, *of Meiningen.*—A young man, aged 19, having taken for some time a decoction of the dulcamara for a chronic cutaneous eruption, wished to increase its efficacy by adding to it an ounce of the extract. After having taken this quantity, within the space of twenty-four hours, he was seized with a defect of sight, vertigo, a trembling of all the limbs, and afterwards with paralysis of the tongue, and cold sweats. As soon as Dr. Schlegel was made acquainted with the source of the mischief, he ordered fifteen drops of a very concentrated solution of the carbonate of potash, in a little water, which was repeated every half hour for the space of twenty-four hours, when all the symptoms of poisoning disappeared.—(*Hufeland's Jour.* 1822.)

Alkanet as a Test.—Dr. Robert Hare, of Philadelphia, finds that the colour of alkanet may be used instead of litmus, producing the same phenomena, but in a reversed order; for the alkanet infusion is made blue by an alkali, and restored by an acid, instead of being, as in the case of litmus, reddened by an acid, and restored by an alkali. Thus as the one is indirectly a test for alkalies, so is the other for acids. When infusion of alkanet is made blue for the latter purpose, the smallest quantity of alkali should be used that is adequate to the effect, in order to preserve the delicacy of the test.—(*American Jour.*)

On the Discovery of Acids in Mineral Substances. By J. SMITHSON, *Esq. F.R.S.*

Acids, it is well known, have been repeatedly overlooked in mineral substances, and hence dubiousness still hovers over the constitution of many, although they have formed the subjects of analysis to some of the greatest modern chemists.

To be able to dissipate all doubts —to ascertain with certainty whether an acid does or does nor exist, and, if one is present, its species, and this with such facility that the trial may be indefinitely renewed at pleasure, and made by all, so that none need believe but on the testimony of his own experiments, is the degree of analytical power which it would be desirable to possess.

So far as I have gone in these respects, I here impart.

As the carbonates of soda and of potash precipitate all the solutions of earths and metals in acids, so do they decompose all their salts by fusion with them. Fusion with carbonate of soda or potash, affords

there a general method of separating acids from all other matters.

Lead forms an insoluble compound with all the mineral acids except the nitric. It may consequently be immediately known whether a mineral does or does not contain an acid element by the carbonate of soda or potash, with which it has been fused after saturation by acetous acid, forming or not forming a precipitate with a solution of lead.

If the production of a precipitate proves the presence of an acid, the determination of its species will present no great difficulty.

1. *Sulphuric Acid.*—If the alkali which has received it from the mineral is fused on charcoal, and then laid in a drop of water placed on silver, a spot of sulphuret of silver will be produced, as I have stated on a former occasion. Bright copper will likewise serve for this purpose. Fusion in the blue flame will often be sufficient to deoxidate the sulphur.

It is needless to observe that the alkali used in this trial must itself be perfectly free from sulphuric acid. When such is not possessed, its place may be supplied by Rochelle salt, or by cream of tartar.

2. *Muriatic Acid.*—I have likewise discovered a test of chlorine, and consequently of muriatic acid, of delicacy equal to the foregoing. If any matter containing chlorine or muriatic acid is laid on silver in a drop of solution of yellow sulphate of iron, or of common sulphate of copper, a spot of a black chloride of silver, whose colour is independent of light, and which has not been attended to by chemists, is produced. The chlorine in a tear, in saliva, even in milk, may be thus made evident. When the quantity of chlorine in a liquor is very small, a bit of sulphate of copper placed in it on the silver is preferable to a solution. To find chlorine in milk, I put some sulphate of copper to it, and place a small piece of bright silver in the mixture.

3. *Phosphoric Acid.*—The alkali containing it, after saturation by acetous acid, gives a sulphur-yellow precipitate with nitrate of silver, which no other acid does. The precipitate obtained with lead crystallizes on the blowpipe. M. Berzelius's elegant method of detecting phosphoric acid is univerally known.

4. *Boracic Acid.*—Its presence in carbonate of magnesia, and in some other of its compounds, is indicated by the green colour they give during their fusion, to the flame of the lamp.

(To be continued.)

EARLIEST ENGLISH MEDICAL WORK.

The earliest medical work written in English, is supposed by Fuller to have been Andrew Boide's "Breviarie of Health," which was published in 1547. It must yield, however, in its pretensions to antiquity, to a much older work, the Breviary of Practice, by Bartholomew Glanville, a manuscript of which is preserved in the Harleian collection. The one title, indeed, appears to have been an imitation of the other. The "Breviarie of Health" has a prologue addressed to physicians, which begins thus: "Egregious doctors, and masters of the eximious and arcane science of physic, of your urbanity exasperate not yourselves against me for making this little volume."

Andrew does not confine his attention to diseases of the body, but treats also of those of the mind; as in the following instance, which may serve for a specimen of his manner: "The 174 chapiter doth shewe of an infirmitie named hereos."

"Hereos is the Greke worde. In Latin it is named Amor. In English it is named Love-sick, and women may have this fickleness as well as men. Young persons be much troubled with this impediment."

After stating "the cause of this infirmitie," he prescribes the following remedy.

"First I do advertize every person not to set to the hart what another doth set to the heel; let no man set his love so far, but that he may withdraw it betime; and muse not, but use mirth and merry company and be wyse and not foolish."

Andrew Borde called himself in Latin, Andreas Perforatus. This translation of a proper name was according to the fashion of the time, and in the instance before us, appears to include a pun: perforatus, *bored* or pierced.

MEDICAL AGENCY,

At COX and SON'S MEDICAL LIBRARY, St. Thomas's Street, Borough.

THE object of this Establishment is to facilitate, upon the most equitable terms, and without delay, the disposal and procuration of MEDICAL PRACTICES—formation of Partnerships—procuring ASSISTANTS and Apprentices for every branch of the profession, &c. &c. Further particulars may be had, by applying either personally or by letter (post paid) as above. Hours of attendance from 10 to 12 on Mondays, Wednesdays, and Fridays.

N. B. A SMALL BUT IMPROVABLE MEDICAL PRACTICE, a short distance from Town, in a populous neighbourhood, to be disposed of—house rent and taxes under £50—To any gentleman of small capital, desirous of establishing himself, the above offers a favourable opportunity. Apply at the MEDICAL AGENCY OFFICE, St. Thomas's Street.

Part I. and II., price 2s. each, of the MEDICO-CHIRURGICAL AND PHILOSOPHICAL MAGAZINE, may be had, neatly done up, containing 6 Numbers each.

LECTURES ON BOTANY.—Dr. Thornton having for many years delivered a course of lectures on the science of Botany, to the gentlemen of St. Thomas's and Guy's Hospitals, intends to commence the course for the present Season, on *Saturday, May* 3, at five o'clock in the afternoon.—Terms, for twelve lectures, and two herborisations, One Guinea.—Names received at Messrs. Cox's, St. Thomas's Street, Southwark, where further particulars may be learnt.

The celebrated Dr. Gall, we are informed, is arrived in London. We have reason to hope that this great philosopher and observer will deliver a course of lectures with demonstrations on the brain, before he quits the metropolis. We hope to have some communications shortly on this subject to lay before our numerous readers.

TO CORRESPONDENTS.

We feel highly obliged to "CIVES EBORACI" *for his inteiligent communication, of which we shall doubtless avail ourselves in due time; but with respect to the highly flattering encomium he has been pleased to bestow upon the* MEDICO-CHIRURGICAL and PHILOSOPHICAL MAGAZINE, *it is not our province, certainly, to offer any other remarks, than it will be our constant endeavour to merit a continuance of his approbation, with that of our readers in general.*

NUMEROUS APPLICATIONS *from various parts of the kingdom have been made, to ascertain by what channel the Magazine can be forwarded. In reply, we beg leave to state, that, upon giving the order to their Booksellers or Newsmen in Town, it will be stamped and sent postage free, (price sevenpence) or otherwise as may be suggested.*

A. Q. *is non-medical.*—M. Y. *is much of the same description. Both returnable.*

We perceive we have hit the Piccadilly DOCTOR "*of London*" *a little too hard over the knuckles. We shall always feel it a duty incumbent upon us, as well as a pleasure, to castigate a poltroon, not for his want of gallantry alone, but for his audacious impudence. All Empirics are alike in this respect. In the mean time we recommend him "two tea-*spoonfuls *of the Tincture of his own* Buchu or bow-wow leaves *three times a day; and a wine-glass of the* DECOCTUM AMARUM *instead of the "Mallow Decoctum," to promote a better secretion of* gall; *with "a blue pill every night for a week" to make him* spit *a little more to the purpose, and an occasional pinch "of Asarabacca."—Quere. When does the "*Doctor" *expect to hear again from his correspondent, the* MAN IN THE MOON? *from* I. P. *of* T.—C. E. G.—*or from the back settlements, whither his great Southcottian fame, no doubt, has reached?*

Communications, advertisements, &c. &c. addressed for the Editors, at the Publishers, &c.

London:

Printed by E. JUSTINS, 41, *Brick Lane, Spitalfields.*

Published by COX and SON, St. Thomas's Street, and 39, High Street, Southwark. Sold also by Sherwood, Neely, and Jones, Paternoster Row; Simpkin and Marshall, Stationers' Court; Callow and Wilson, Princes' Street, Soho; John Cox, Berner's Street, Oxford Street; E. Willson, Corner of Royal Exchange; Chappel, Cornhill; W. Turner, Cheapside; T. Boys, Ludgate Hill; H. and W. Smith, 192, Strand; G. Roake, 31, Strand; W. Sams, St. James' Street; W. Stewart, South Bridge Street, Edinburgh; Hodges and M'Arthur, Dublin; &c. &c.

THE WEEKLY

MEDICO-CHIRURGICAL & PHILOSOPHICAL MAGAZINE.

No. XIV.] SATURDAY, MAY 10, 1823. [*Price* 4*d.*

" FLORIFERIS, UT APES, IN SALTIBUS OMNIA LIBANT
OMNIA NOS, ITIDEM, DEPASCIMUR AUREA DICTA."

POISONING BY OXALIC ACID.

(Concluded from page 201.)

In reference to legal medicine, oxalic acid presents several interesting points for consideration. The medical evidence will be derived, as in the case of other poisons, from the symptoms, from the morbid appearances, and from the chemical analysis of the contents of the stomach and intestines, of the coats of the stomach, of the vomited matter, and of suspected articles of food; for the analization of which the following process is to be observed.

The stomach is to be washed with pure water, and if disorganized, preserved for analysis. The washings, the contents of the stomach, the vomited matter, and the disorganized tissues and suspected articles of food, are to be boiled separately, a little pure water being added if necessary. If chalk or magnesia has been used as an antidote, what remains on the filter (except that from the tissues) is to be preserved for analysis. The filtered fluid is to be tried first with litmus paper, and then by the three following tests—the hydrochlorate of lime, the sulphate of copper, and the nitrate of silver.

1. Decolorize the fluid, if necessary, with chlorine. The hydrochlorate of lime, dropped into a solution containing oxalic acid, or an oxalate, especially the latter, throws down an insoluble oxalate of lime. But it also precipitates with the carbonates, sulphates, phosphates, tartrates, citrates, and with all their acids but the carbonic. The following mode of procedure will serve to distinguish it from these substances. The nitric acid will not take up the sulphate of lime, but a few drops of it dissolves the oxalate. The hydrochloric acid will not dissolve the oxalate, unless added in very large quantity, while two or three drops will take up the carbonate, phosphate, tartrate, or citrate.

2. Decolorize a second portion of the fluid with chlorine. The sulphate of copper precipitates oxalic acid bluish-white, and the oxalates pale blue. This is a test sufficiently delicate, especially if any free oxalic acid is previously neutralized with potass; and it is also a very useful one, since the sulphate of copper does not affect fluids that contain sulphuric, hydrochloric, nitric, tartaric, citric acids, or their ordinary salts. But it precipitates the carbonates, and throws down phosphoric acid, whether free or combined. The oxalate, however, is easily distinguished; for it is insoluble in hydrochloric acid, while a few drops of that acid at once take up the phosphate or carbonate.

3. The nitrate of silver produces a heavy white precipitate with oxalic acid, and still better with the oxalates; and this precipitate, when dried and heated over a candle, becomes brown on the edge, then of a sudden fulminates faintly, and is all dispersed in white fumes. When impure, it deflagrates like gunpowder, and when in too small quantity to be collected, the filtering paper burns as if steeped in nitrate of potash. This is a very characteristic and delicate test. From a quarter of a grain of oxalic acid dissolved in 4000 parts of

water, we have procured enough of the powder to shew its fulmination twice. The precipitation alone cannot be trusted to; for it may equally take place with hydrochloric, phosphoric, citric, or tartaric acid, and likewise with the alkalis. But when the test of fulmination is tried, there is no chance of its being confounded with any of these, except, perhaps, with the tartaric and citric acid. The compounds of these acids with silver, we find, possess properties, that will render the nitrate of silver one of the simplest and most correct tests for distinguishing them from each other, and from oxalic acid. The nitrate of silver becomes brown under exposure to heat, froths up, then deflagrates slightly, with the discharge of white fumes, and a large quantity of dull, ash-grey, crumbling matter remains, of a very peculiar fibrous structure. The tartrate of silver becomes brown, and froths up like the citrate, white fumes are discharged without even deflragation, and there is left an ash-coloured botryoidal mass, encrusted outwardly with silver.

If magnesia or chalk has been given as an antidote during the patient's life, the oxalate of magnesia or lime may be mingled, in the form of powder, with the contents of the stomach, or with the vomited matter. The powdery matter is then to be separated by elutriation from what remains upon the filter during the previous process. If magnesia has been the antidote employed, it is only requisite to boil the powder in pure water for a few minutes, and then subject the filtered fluid to the three tests described above. For the oxalate of that earth is sufficiently soluble to furnish, even with a single ounce of water, a solution in which all the foregoing characters may be observed. If the antidote employed has been chalk, then the powder is to be boiled for fifteen minutes with half its weight of pure subcarbonate of potass dissolved in twenty or thirty parts of water. A mutual interchange then takes place, and the solution contains oxalate and carbonate of potass. In applying the tests to this solution, the free alkali is to be previously neutralized with hydrochloric acid, when hydrochlorate of lime, or sulphate of copper is to be used, and with nitric acid, before using the nitrate of silver. In the last case, there ought to be as little excess of acid as possible, because the oxalate of silver is soluble in nitric acid.

These tests of oxalic acid are very little influenced by the presence of such animal matter as may exist in the suspected fluid after boiling and filtration. The chief animal principle then present is gelatin. Gelatin alone is not precipitated by hydrochlorate of lime, sulphate of copper, or nitrate of silver; neither does it affect the delicacy of the two first as tests of oxalic acid, but when, in very large proportion, it suspends the action of nitrate of silver. Whenever this obstacle is encountered, or if, from any other cause we have left unexamined, this the most decisive of the tests does not give satisfactory results, the oxalic acid may be thrown down with the hydrochlorate of lime, and the insoluble oxalate boiled with carbonate of potass, as just described. This process will probably be always proper when the suspected fluid is deeply coloured; for we cannot decolorize it with chlorine before using the nitrate of silver, since chlorine precipitates abundantly with that salt.

Though the description of the tests just given may appear complicated, the application of them in practised hands is sufficiently simple.

[*We regret that our limits have prevented us from entering into all the important details of this excellent article, which cannot fail to be acceptable to our readers, even in the condensed form we have hitherto continued it, as containing some practical observations relative to oxalic acid that cannot be too generally known among the profession.*]

Some Account of M. Bichat's *Theory of Life.*

(Concluded from page 197.)

But the principal and most important feature in the physiological system of Bichat, is the complete, and entire, and exclusive explanation of all the phænomena of the living system upon the principles of vitality alone. Former physiologists have not always kept this distinctly in view; they have not invariably recognised the principle, that the living system is in a certain sense insulated with regard to other matter; that it is governed by a set of laws *essentially its own*, peculiar to itself. The human body has been regarded, too often, as a mass of matter, organized to be sure, but yet under the direction of physical laws, and the performance of its functions has been ascribed to the powers of inorganic matter. Hence physiology has generally been somewhat tinctured by the favorite science of the age, with some of its notions. In the days of mechanical philosophy, the functions were explained as much as possible by the laws of mechanics. The force of every muscle was calculated to a grain, the velocity and momentum of the blood were supposed to produce the motions of the living fibre, and the fibre to be so constituted as to vibrate like the chords of an instrument; the stomach acted on the food like a pair of mill-stones, the chyle was absorbed from the intestines by the power of capillary attraction, and animal heat produced by the mutual attrition of the fluids and solids. So with the chemists, the human system was no less than a chemical laboratory. The stomach was a crucible, a retort, or an alembic; the lungs a furnace, and respiration a true combustion, where the refuse and stubble of the system were consumed, and by the same means, with a commendable œconomy, the animal heat was maintained; whilst secretion and exhalation were resolved into the operations of precipitation and distillation. These false views have always retarded the progress of the science. But with Bichat the properties of *life* were all in all. The phænomena of the system, whether in health or disease, were all ascribed to their influence and operation. And although there is doubtless much room for difference of opinion with regard to the particular views which he entertained of the nature of vitality, and although much may be said in defence of the opinion that it consists in one single independent principle, and not in a collection of distinct properties, yet this really makes very little difference. It is as easy to conceive the different properties to be so many distinct modes of operation of one principle, as it is to view them as *existing* separately, and only *acting* in concert. We have only to alter a few modes of expression, accordingly as we adopt one or the other of these hypothesis; the things intended remain essentially the same, *i. e.* the vital functions are all referred to the operation of the vital laws, in the same way that the phænomena of physics and chemistry are all referred to physical and chemical laws.

To many of these opinions of Bichat there are strong objections; and in a general way it may be observed, that he has very much over-rated and exaggerated the distinctions which exist between the two lives, that he has too often exhibited a caricature of the truth. Not that he had not himself perfectly clear ideas of their exact connexions and distinctions; but it happened, that, carried away by an ardour which had often as much poetry as philosophy in it, he gave to his doctrines the colouring of a warm and rich imagination, and, like every enthusiastic young man who is eager in the diffusions of favorite opinions, frequently drew truth with too bold and well defined outlines, and represented that as entirely distinct in nature, which was only so in his artificial arrangement, and in nature was

blended and compounded with something else. His system affords a happy and striking expression of some of the fundamental distinctions of physiology; and though in some measure calculated to give to beginners in the science views a little too artificial, yet when qualified by a proper acquaintance with the details of the phænomena of life, as exhibited in the whole vital creation, is better adapted than any other to form us to correct, methodical, and distinct views.

To speak more particularly, much might be said to show that he attaches by far too great importance to many of the distinctions which he draws between the two lives in his Physiological Researches. This remark is true of those founded upon the external forms of the organs, the mode of their action and its duration, and those founded upon the natural end of the two lives. Not that there is not a *general difference* in these respects between the two lives, but that he has drawn the line with far too great distinctness, and laid two much stress upon the division which it establishes. More especially with respect to the influence of habit and the seat of the passions, we think very strong objections lie against the views which he has advanced; and his doctrine of the vital properties, in precisely the form which he gave it, whether as it regards their number or the exact relation which they severally have to the functions to whose performance they contribute, would probably meet with few defenders, although in its general essential features, and with some considerable alterations of detail, it is that adopted by some of the most eminent physiologists of our own country and of Europe.

MEMOIR.

(Continued from page 198.)

Besides giving origin to one set of the divergent fibres, the fibres themselves of the Pyramidal Bodies are represented, by these anatomists, as completely crossing each other immediately after their origin; and this decussation was at first claimed as a discovery. It appears, however, that this complete crossing does not extend to the whole of the pyramidal bodies; but that, in reality, these anatomists have described only that decussation, which, as the French Commissioners remark, was first discovered by Mistichelli in 1709; next by Francis Petit in 1710; and was plainly delineated by Santorini. To this Drs. Gall and Spurzheim replied, that although these writers had described this decussation, they had done it with no precision—an assertion which Dr. Gordon disproves by quotations from their respective works; and as to the smaller merit, of having recalled the attention of physiologists to this piece of structure, Dr. Gordon shows that it never has been overlooked, but, on the contrary, has been regularly noticed by Winslow, Lieutaud, Haller, Sabatier, Girardi, Vicq d'Azyr and Portal; all of whom mention, and some of them clearly describe it, though others doubt the reality of its existence. 'These decussating ridges,' adds Dr. Gordon, 'are found, by the me-
'thod of Reil, to be a part of a consi-
'derable set of fibres, which actually cross
'from one side of the medulla oblongata
'to the other, and the whole of which may
'be distinctly unfolded in the coagulated
'brain, but in no other way.'

There is one other point of structure peculiar, in several respects, to Drs. Gall and Spurzheim, to which I shall briefly advert; it relates to the convolutions of the brain. According to these anatomists, the convolutions of this organ are formed by the expanded terminations of the divergent fibres, which are covered with grey matter; they consist of two distinct plates or layers, which touch in the median line of each convolution, and, according to them, are slightly agglutinated to each other by a mucous *neurilema*, or very fine cellular tissue. Each convolution, it is added, may be easily separated into two layers; and if this separation extend through the whole convolutions, all their duplicatures will be transformed, it is said, into a kind of membranous expansion, white, smooth, and fibrous beneath, and covered exteriorly with grey substance. Such an expansion is declared to happen in advanced stages of hydrocephalus; and it was such a case, it seems, which first led Drs. Gall and Spurzheim to examine the structure of the brain in general, and of the convolutions in particular. This separation of them into two layers, it is alleged, may also be accomplished very easily by artificial means; that is, by simple pressure with the fingers

from below upwards, or by blowing air, or projecting a stream of water upon them in the same direction.

By Dr. Gordon this account of the structure of the convolutions is declared to be quite erroneous, and at variance, in almost every particular, with the very accurate and elaborate investigations of Reil. So early as 1795, that anatomist, who was the first to investigate the *fibrous* structure of the convolutions, described their white substance to be laminated, the laminæ to be fibrous, and the fibres all to radiate towards the surface. The cortex or *grey* substance which covers the white matter, he also described to be fibrous, and its fibres to lie in laminæ. In 1807, along with a variety of figures illustrating the fibrous structure of the cerebellum, he exhibited an engraving of one of the convolutions of the cerebrum, and accompanied it with descriptions, stating it to be composed of medullary plates, and the plates of fibres, like the laminæ of the cerebellum; and that these laminæ cohere the most weakly in the middle. In 1809 and 1812, he published farther investigations into the structure of this part of the brain, and described a stratum of white fibres, lying between the bottoms of the convolutions and the central parts of the brain, and connecting the convolutions to each other. 'Nothing,' says Dr. Gordon, 'can be more 'correct than the descriptions given by 'Reil of the laminated structure and 'fibrous appearance of the convolutions. 'With regard to the intermediate sub-'stance, the dissections which I have 'hitherto made, do not enable me to speak 'with confidence; though I have no doubt, 'from Reil's general accuracy, both as to 'its existence, and the correctness of the 'representations he has given of it.'

From what has just been stated, it appears, that the investigations of Reil, regarding the structure of the convolutions, not only preceded in time, but greatly surpass in minuteness and accuracy, those of Spurzheim and Gall.

(To be continued.)

HOSPITAL REPORTS.

There is now in Guy's Hospital a most singular phenomenon in the person of Edw. Roper, whose whole body from the neck downwards is covered with fungous tumours to a most incredible amount, differing in size from a goose's egg to that of a walnut. There are also some of them on his head. The patient is besides afflicted with a well marked *fungus hæmatodes* in the left eye, occasioned, he states, by a stubble straw, in harvest time, about seven years ago—notwithstanding the bulk, and number of the tumours with which his body is covered (to the amount of between forty and fifty) none of them, previous to November last, seemed to give him any uneasiness or apprehension, they were so comparatively small and few—since which they have increased to their present state. The largest are situated below the nipple of the left breast—between the right breast and corresponding arm pit—between the umbilicus and pubes; in fact the patient is literally studded with them; some of which are tending to suppurate.

In addition to these, there is exostisis of the right clavicle, and an unreduced dislocation of the right ulna of long standing; which drew from Sir Astley Cooper to Mr. Key, the remark, that taking him all in all, he was "a perfect non-descript," whose like, in all probability they might never meet again. The *case* was *forwarded* by Mr. Snaith, of Boston, in Lincolnshire, within ten miles of which the patient belongs.

Cases from the Appendix of Sir A. Cooper's Works on Dislocation, &c. &c.

(Concluded from page 200.)

Lateral Dislocation of the Radius.—Mr. Freeman, Surgeon, of Spring Gardens, brought to my house a gentleman of the name of Whaley, aged 25 years, whose poney running away with him, when he was 12 years of age, he struck his elbow against a tree whilst his arm was bent and advanced before his head. The olecranon was broken and the radius dislocated upwards, and outwards above the external condyle, and when the arm is bent the head of the radius passes the os humeri. He has an useful motion of the arm, but neither flexion or extension are complete.

Dislocation of the Radius forwards.—Mr. Tyrrel informed me, that a sailor, about 30 years of age, came to St. Thomas's Hospital, as an out-patient, with a dislocation of the radius forwards, which had happened between six and seven months. The head of the radius could be distinctly felt upon the fore part of the

humerus, especially when the arm was bent as much as the nature of the accident would allow, and when the hand was bent as much as it could be towards the fore arm. The position of the limb was half supine; and when the humerus was fixed, the hand could neither be rendered perfectly supine or prone. On the attempt to flex the fore arm, a sudden check to its motion was produced by the head of the radius striking against the humerus. From constant use of the arm after the accident, considerable motion had being re-acquired, yet the man was anxious for an attempt being made to reduce it, which he was persuaded against, and he went to Guy's Hospital, where the same advice was given to him.

Case of Fracture of the Condyles of the Os Humeri.

Portsea, March 5, 1823.

Dear Sir—Allow me to recommend to you the bearer, Mrs. Hewett, of Southsea, who met with a severe accident on the 21st of September last, by a fall from a chaise, which occasioned a compound fracture of the left arm, as follows:—the external and internal condyles were fractured longitudinally; the intermediate space which receives the olecranon was quite comminuted, and three pieces of bone were extracted soon after the accident from the external wound; there was also a transverse fracture about two inches and a half above the condyles.—Evaporating lotions were applied during the two first weeks, and the case proceeded favourably. I more particularly call your attention to the wrist of the right arm, which was much injured at the time of the accident, having recommended friction, which I am afraid has been neglected.

If time will permit, your opinion of the above case will much oblige,

Your's respectfully,

T. Ivimy.

This lady has in a great degree re-acquired the flexion and extension of the left arm. A. C.

Compound Fractures of the Olecranon.—I have seen two cases of this accident in the last six months, both of which have done well.

Compound Dislocation of the Wrist, Ulna projected, and Fracture of the Radius.—John Winter fell from a ladder upon his hand and knee; the hand was bent back, and the ulna protruded at the inner part of the wrist. Mr. Steel, of Berkhamstead, attended, the bone was reduced, a roller was put around the wrist, and the wound healed very soon by adhesion. In seven weeks he was well, excepting that a slight swelling of the tendons remained for a few weeks longer.

PARAPLEGIA FROM SPINAL INJURY.

Communicated by R. Gaitskell, Esq. Sen. Fellow of the Royal Coll. of Surgeons, &c.

G. S. a young man, about 18 years of age, fell from a scaffolding plank suspended on the side of a ship upon a tar barrel lying underneath.

The distance was about 12 feet, and the centre of his back coming in contact with the tar barrel, gave a circular figure to the spine; the convexity being formed by the bodies of the vertebræ in front, the concavity, by the spinal processes behind, the effect of this sudden violence was a separation of two of the last dorsal vertebræ, as a pressure on their spinal processes made them recede inwards without fracture. The pain was exquisite, and all below the parts affected became completely paralysed. The integuments were insensible to the touch, or the deepest puncture of a needle.

The detrusor urinæ, abdominal muscles and intestines, were so diminished in sensibility as to destroy their expulsive power, therefore the catheter was employed for the bladder, and stimulating injections for the rectum.

All the muscles of the thighs and legs refused the stimulus of volition. Looking upon this injury as of a most important and serious description, I gave a very cautious prognosis—my mind was now directed to the best mode of relieving my patient. For this purpose I placed him on a horse-hair mattress, that there might be no irregularity on the surface. I then put a girt round the pelvis, to the centre of which behind was sown a piece of strong sheeting; this was fastened to the bottom of the bedstead to fix the trunk. I placed something similar under his arm-pits with two strong pieces of cloth, secured to the head of the bedstead. By this contrivance the pelvis was drawn down with great gentleness, and occasionally secured, which mitigated his pain, and added to his comfort. The constitutional treatment was copious bleeding from the arm, saline opening medicine, and stimulating glisters. Leeches were inapplicable to the case, as the least attempt to move the trunk caused the most exquisite torture. About a month after the accident he began to move his toes, then raise his legs a little; the skin became gradually sensible, and the bladder and rectum shewed a return of nervous power. In three months he was enabled to sit up, walk with the aid of crutches, and in six months perfectly recovered.

Rotherhithe, May 2, 1823.

A Case of Neuralgia, affecting the Branches of the Median Nerve after a Burn on the Thumb, and which was cured under the Use of the Carbonate of Iron. By HENRY JEFFREYS, Esq. *Surgeon of the St. George's and St. James's Dispensary, and Assistant Surgeon to the Lock Hospital.*

John Judd, thirteen years of age, in attempting to remove a saucer that had been standing for a length of time close to the fire, received a severe burn on the end of the right thumb. A vesication immediately arose on the injured part, to which some quack ointment was applied. The boy complained of much pain, and on the following day it was so much increased that his mother took him to an apothecary, who punctured the vesication, and directed a poultice to be applied. Under this application the vesication dried up; but the pain continued unabated, and in about a fortnight after the accident had occurred he was brought to my house, for my advice. At that time the pain had extended itself as high as the bend of the elbow, and evidently depended on injury of some nervous branch. It came on in paroxysms, which began in the burnt part, and proceeded along the ball of the thumb and the inner edge of the radius, in the course of the branches of the median nerve, up to the elbow. The pain was compared to the running of needles, or some sharp instrument, through the part. The attacks came on at irregular intervals, but were most frequent, and of longest duration, in the evening; and they frequently awoke him out of his sleep in the night. During a paroxysm, the thumb was often affected with involuntary twitchings and agitation. The slightest pressure on the burnt part brought on an attack of pain; and the same effect was produced by pinching up, or even touching the skin in the course of the disordered nerves. There was a strongly marked expression of suffering depicted in the boy's countenance, but his general health was apparently unaffected. The end of the thumb was still covered with a pellicle of thick, dry, brown-coloured cuticle: this was removed, and the part beneath, as well as the rest of the thumb, was, to all appearance, in a perfectly healthy condition.

The thumb was wrapped up in soap-plaster; and he was directed to take Dover's powder, and the extracts of hemlock and henbane. For a day or two after he began this plan, the paroxysms of pain were less frequent,

and more bearable; but they soon relapsed into their former severity, and he was therefore put upon the carbonate of iron, of which he took a scruple three times a day.

At the end of a week, the attacks had become much milder, and extended no further than the wrist. The pain, however, could still be excited by pressing or pinching the skin, even as high as the elbow. The dose of the medicine was increased to half a drachm, and agreed very well. At the expiration of a fortnight, the paroxysms had ceased, and he suffered no pain except when pressure was made upon the skin in the course of the injured nerves. This effect also soon subsided, and at the end of six weeks, being quite well, the medicine was left off.

I desired him to call on me without delay, if the pain should threaten to return; but three months have elapsed since I discontinued my attendance, and I have heard nothing from him.

Clarges Street, April 7, 1823.

Case of Tetanic Affection, in which the Oleum Terebinthinæ was successfully employed. By William Toms, Esq. *Member of the Royal College of Surgeons.*

Susanna Somerton, a young woman residing in this town, about twenty-five years of age, had been for a considerable time past the subject of attacks of epilepsy, the exciting cause of which was attributed to fright. On being called to attend her, I perceived the energies of the brain and her intellectual powers had been much enfeebled, which I supposed was caused by the severe paroxysms of epilepsy she was subject to. Scarcely a week passed on without her being attacked with the most violent convulsions; after they had subsided, she remained in a state of stupor for a considerable time, and appeared perfectly insensible to what had taken place. The patient being of a full plethoric habit of body, and considering the symptoms indicated a determination of blood to the head, she was bled freely from the arm. I then applied blisters to the head and neck; she was also freely purged with the pulv. scam. cum cal. and infus. sennæ, cum magn. sulph. I then followed up the treatment by giving her some of the most powerful antispasmodics. She was evidently relieved by this treatment, the paroxysms being less frequent, and much less severe.

Her mother called here early one moning, to inform me this young woman was again suffering from a severe attack of those fits; and they were dreadfully alarmed by her being unable to open her jaws, which had remained immovably closed for eleven hours. On visiting the patient, I found her in the state described by her mother. She had complained of great pain and stiffness in the back part of the head; also at the lower part of the sternum, shooting to the back; the muscles of the spine were much affected, and the trunk of the body forcibly bent backwards; the extremities rigidly extended, and the stiffened parts affected with violent contractions; the eyes immoveable in the sockets, and considerably protruded; pupils dilated; her countenance denoted intense anxiety; and the pulse 110. Fortunately she had two decayed teeth; therefore, I repeated my former treatment with little difficulty. Two blisters were also applied on either side the jaws. In two days the jaws opened, and she was enabled to use her mouth as before.

Five days after, she was attacked in a similar manner, and the jaws remained closed for three days. The same treatment was adopted, with equal good success. She continued tolerably well for eleven hours, when all the former symptoms returned with redoubled vigour. The same plan of treatment was pursued, without the slightest effect, and every thing that was administered proved

ineffectual. Her jaws remained locked for six days and nights, when I received the London Medical and Physical Journal, and was much pleased to find a case of tetanus cured by the oleum terebinthinæ. I therefore gave my patient immediately ol. terebinth. ℥ss. in a little gruel, and repeated it every three hours. The third dose completely restored her; the mouth opened, and she regained the proper command over the muscles. The spasms were much relieved on taking the second dose; and, on repeating the third, the bowels became excessively purged, and violent vomiting was produced. She also described a peculiar sensation felt at the extreme points of the finger and toes, after taking the turpentine. The jaws have been locked four times since the first exhibition of the ol. terebinthinæ, and each time it was repeated with equally good success. The mouth opened within one hour after the second dose was given. The patient's health is generally improved.—*(Lond. Med. & Phy. Jour.)*

Kingsbridge, Devon, March 2, 1823.

Puerperal Convulsions cured by Ergot.

The Secale Cornutum, or ergot of rye, has for some years enjoyed considerable reputation among our American brethren in certain puerperal cases, to which we shall draw the attention of our readers more particularly on a future occasion. Mean time we subjoin a case illustrative of its use, related by Dr. Waterhouse.

Mrs. L. H. of nervous temperament and delicate habit, aged nineteen, was, on the 24th of June, 1814, seized with the usual precursory symptoms of parturition. I found her affected with wandering pains of the back and abdomen, some throbbing pain of the head, and a tense pulse, though natural in frequency. The loss of fifteen ounces of blood, with fomentations to the abdomen, and a dose of opium, gradually gave her relief; and at evening she fell into a quiet and refreshing sleep. The next morning I was sent for in haste, and was informed that, after a quiet night, she discovered in the morning some symptoms of derangement. She complained of wandering pains in the abdomen, and of a throbbing sensation in her head. These symptoms increased, till the most horrid forms of puerperal convulsions were brought on that I ever witnessed. She was constantly muttering things in the most incoherent manner; her eyes were rolling from side to side, and turning up in their sockets. She had so frequently bitten her tongue, that the blood was flowing profusely from her mouth; her extremities were of a deadly coldness; aud the violent spasms and contractions of the muscles of her limbs, back, abdomen, neck, and lower jaw were truly alarming. The pulse was natural, but less frequent than in health. With much difficulty, her lower extremities were immersed in warm water, and large quantities of the tinctures of opium and assafœtida were forced down. Her abdomen was fomented, and her extremities smartly embrocated with stimulating applications, &c. but all to no purpose. There was no hemorrhage; but, from the condition of my patient, it was impossible to make that accurate examination *per vaginam* that I wished. I could, however, ascertain that the os uteri was in a small degree dilated. The circumstances were so urgent, that I could not defer the use of means till I could procure a consultation. Her strength was rapidly wasting, pulse small and frequent, breathing laborious, and countenance ghastly. The ergot presented itself to my mind as the only probable means of saving her life. I mixed thirty grains in a small quantity of warm water, and gradually insinuated a table-spoonful between her teeth, worked it into her mouth, and in two or three minutes she had swallowed it. The effects were almost instantaneous, and truly astonishing. Her spasms

gave way, the operations of her mind became regular, and she awoke, as she supposed, from a disturbed and painful sleep. She complained of much weariness. A strong cup of tea was given her, with some light nourishment, and she soon fell into a quiet sleep. In the evening following, true and forcible labour-pains came on, and I delivered her in a short time with perfect safety.—(*Philadelphia Journal*, No. 9.)

New Method of performing the Operation of Lithotomy in the Female, by Dr. LISFRANC.

The patient, in this operation, is placed in the usual position, and a common catheter is passed into the bladder. Its convexity is then turned upwards; the handle is given to an assistant, who, pressing lightly from above downwards, depresses the urethra and vagina. The part to be operated upon is that space lying between the urethra and the symphysis of the pubis. The surgeon, having ascertained the position of the two rami of the os pubis and of the clitoris, passes his finger into the vagina, in order to ascertain the course of the pudic artery, which is occasionally irregular. The operator then taking a common bistoury, and holding it like a writing-pen, makes a semilunar incision, (the convexity being upwards,) marking with his left hand the spot where the incision should begin and end. It is to begin on a level with the right side of the meatus urinarius, one line distant from that branch of the pubis, and is carried to the same point on the other side. It is recommended to cut the cellular tissue layer by layer. It is extremely important not to make such a degree of pressure on the anterior surface of the bladder as to detach it from the pubis. The surgeon having reached the anterior and inferior part of the bladder, may open it transversely, after having passed his bistoury into the cavity; but, if the thumb and the fore-finger of the left hand are introduced, (the first in the vagina, and the second into the wound,) and the parts between are a little stretched, the bladder will become tense, he draws a little forwards, and the transverse incision will be more readily and easily made. Repeated experience, it is said, has proved that there is no danger, in following this method, of wounding either the urethra or the pudic arteries; and it is impossible to injure the vagina. It is to be observed, that there is less danger of hemorrhage from a wound in the body of the bladder, than in its neck. The wound made by this operation is capable of greater extension than that made in the ordinary manner, and, consequently, is more advantageous for extracting large calculi. The infiltration of the urine appears to be impossible, for the following reasons: 1st, because the bladder is situated higher in the woman than in man; 2dly, because the cellular membrane between the bladder and pubis is fine, elastic, and in small quantity; 3dly, because the shortness, breadth, and position, of the urethra favor the escape of the urine by the natural passage. Inflammation of the bladder or peritoneum are not, of course, more to be feared in this than in the common mode of performing the operation.—(*Journal Universal, Fevrier* 1823.)

Case of Perforation of the Œsophagus.

A woman, aged twenty-two, was admitted at La Pitié, on the 31st of January, 1823. She had been put to bed a few days before at the Maternité, where she was affected with puerperal peritonitis, for which thirty leeches had been applied. She was but imperfectly recovered when she left the Lying-in Hospital; and, after some days, applied at La Pitié under the following symptoms:—The face pale and anxious; the skin dry; the

pulse small, frequent, and contracted; the abdomen slightly distended, and painful. The patient augured very unfavourably of the result.—February 1st. Thirty leeches were applied to the belly, and a simple tisane administered.—2d. The patient had frequent vomiting: twenty leeches were applied, and an anti-emetic mixture. The vomiting ceased, and she appeared better. At two o'clock, she was agitated in consequence of a visit from some of her friends, and the receipt of a letter from her lover: the visitors had scarcely left her, when she expired.

The body was opened thirty-six hours after death. In the external appearance there was nothing worthy of remark, except some distention of the abdomen, which was filled with a considerable quantity of purulent serosity, with albuminous flocculi. Slight adhesions existed between the intestines and the abdominal peritoneum. The stomach and intestines were empty, and white internally. The uterus had still the size of a large pear, containing some clots of blood, and having the vascular orifices still open. On opening the chest, both cavities were found filled with a dark brown fluid; and, at the distance of three lines from the cardia, the posterior part of the œsophagus was perceived to be completely destroyed, to the extent of four fingers breadth: nothing remained of this portion but some black sphacelated shreds. The gangrene pervaded the mucous membrane for two inches further upwards, but without involving the other textures. The pneumo-gastric nerve was seen white and isolated, in the midst of the parts destroyed. The liquid which had escaped into the thorax contained a worm of the genus *lumbricus*, four inches long. No symptoms had led to the suspicion of this extensive destruction of the œsophagus.—*(Revue Medicale, Fevrier.)*

Experiments relative to Yellow Fever, performed by M. Guyon, *at Fort Royal, Martinique.*

1. June 18th, 1822, he took the shirt of a soldier affected with yellow fever, which was completely soaked *(toute imbibée)* in the sweat of the patient, put it on immediately, and wore it for twenty-four hours. At the same time he was inoculated in both arms, by M. Cuppé, surgeon of marines, with the yellow matter, from blisters in a state of suppuration.

2. June 30th, M. Guyon drank a small glass holding about two ounces of the *black vomit;* and afterwards, having rubbed both arms with the same matter, was inoculated with it by M. Cuppé.

3. July 1st. A patient having died of yellow fever on the fifth day of the disease, M. Guyon put on his shirt, impregnated with black matter still warm, and immediately went into the bed of the deceased, which was soiled with various excrements. He remained six hours and a half, sweated, and slept in it, in presence of many witnesses.

4. July 2. The patient who had afforded the opportunity of making the first experiment having died, his body was opened. The stomach contained a pretty large quantity of black matter, of a bloody appearance, and the internal membrane was red and inflamed. M. Guyon was again inoculated in both arms with this matter, and the punctures were covered with portions of the diseased stomach.—The applications were removed twenty-four hours after: the inoculated parts were inflamed and painful, and the axillary glands somewhat tumefied.

M. Guyon enjoyed uninterrupted health during the performance of these experiments, which took place before numerous witnesses; and the authenticity of which is guaranteed by the signature of M. Donzelot,

lieutenant-general and governor.—*(Revue Medicale, Fevrier.)*

Remarkable Fact relative to the non-Contagion of the Yellow Fever.

A young Englishman, who arrived at St. Thomas's the preceding year, with a young and beautiful countrywoman whom he had secretly married, was attacked by the yellow fever. When the disease was at its height, and the symptoms of inevitable death became apparent, the young woman, in despair, and determined not to survive the object of her affections, undressed herself *entirely*, and placed herself by the side of her dying husband in bed, embracing his body. She remained for ten hours in this situation, and was with difficulty removed after he had breathed his last. She did not experience the slightest symptoms of the disease.—(*Revue Encyclo. Jan.*)

MUDAR.

At a meeting of the Asiatic Society of Calcutta, held the 14th of November, 1822, the secretary laid before the meeting an Essay on *Mudar*, or *Asclepias Gigantea*, and its medical virtues, by George Playfair, Esq. The Mudar is prepared as follows: the roots are dug from a sandy soil in the months of April and May. They are well washed in clear water, till every particle of soil is removed; the moisture is then carefully absorbed by wiping with a cloth. They are allowed to dry in the open air to such a degree, that the milky juice becomes, in some measure, inspissated. The outside brown crust is then to be scraped off, and the rind left pure and white. The rind is now to be sliced off, or separated from the woody part, and dried for use. When reduced to a powder it must be preserved in bottles, well corked, as it is apt to attract moisture. The Mudar is a powerful tonic and alterative, a stimulant and deobstruent, and, combined with opium, a sudorific. It has been given with great advantage in syphilis, lepra, in cutaneous eruptions, and dropsy, in rheumatism, hectic fever, and tabes from glandular obstructions, in tape worms and intermittents. It has been found very efficacious in that species of cancer so common among the natives of India, called lupus, and in all the varieties of leprosy or elephantiasis. In the horse it appears effectually to cure beersattee, a disease common and destructive in this country. The dose is about five grains twice a day. It is employed externally in ulcers, &c. The occasional use of it in the Presidency General Hospital, appears to prove that it is a remedy of considerable activity, and highly deserving the notice of medical practitioners. — *(Calcutta Government Gazette.)*

On the various Means of Preparing and Exhibiting the Croton Tiglium, used by the Natives of India.

These nuts have been used medicinally by the native practitioners of the Indian peninsula from time immemorial. The seeds are of a convex shape on one side, and smooth and angular on the other. They are reckoned by the natives amongst their drastic purges, and are frequently prescribed by them in maniacal cases, or on other occasions when powerful purgatives are indicated. Their operation is rendered much less violent when the seeds are cleansed from the thin filament in which each is closely enveloped: then as much as one of the seeds may be given as a dose. A fixed oil is extracted from the seeds by the natives, called *nervalum unnay*. It is considered a very valuable external application in rheumatic affections; but, when used in this way, it is generally mixed with some bland oil, to counteract its acrid effect; and, as far as I could learn, the oil

has never been administered internally by the natives.

The way to prepare the seeds is as follows:—take the seeds of the croton *(grana tiglia)*, which, after being each enveloped by a small ball of fresh buffaloe's dung, about the size of a sparrow's egg, put upon some burning charcoal till the dung is burnt dry; then removing them, and taking off the shells from the seeds, pound the nuclei, and divide into two pills, viz. two of each grain of the mass. The mass is generally mixed with some honey, to give it bulk and consistency. The advantage derived from the above-mentioned process is that, in the first place, it facilitates the removal of the shells; secondly, it renders the nucleus more fit for pounding; and, thirdly, the gentle torrefaction it undergoes corrects, in a great degree, its natural acrimony. One pill of the above is sure to operate; two pills a full dose: an excess in the dose acts violently on the stomach. It is a powerful evacuant of the bile; and, by the Malays, is administered successfully as a hydragogue.

The root of this was formerly regarded, at Batavia and Amboyna, as a specific in dropsy, taken infused in wine.

At Benares, they boil the seeds soft in milk, stripping them first of the shells; after which they pound them, forming the mass by means of lime-juice, at the rate of one pill from each seed: two of these pills are considered a full dose. A mode in Guzerat is still more simple, and consists merely in pounding the kernels, without any previous operation, and forming, by means of honey, from each nucleus two pills; one of which generally suffices for a drastic purge, directing a gill of warm water to be taken immediately after swallowing the pill. In this preparation, the inherent acrimony of the kernels makes up for the smallness of the dose; and the water drank upon it insures, they say, its speedy operation downwards.

The chief advantage of these pills appears to me to be the smallness of the bulk necessary to obtain the desired effect. None of the drastic purges are so certain; none more rapid in their action; and none, I think, so little annoying by griping or nausea. Five hundred doses may easily be contained in an ordinary pill-box.

The expressed oil of the seeds has been of late introduced into practice in Europe, in cases where drastic purges are indicated. Dr. Conwell, of the Honourable Company's Madras establishment, was the first who sent it to England; at the same time he contrived to have a small quantity conveyed to the principal universities on the continent of Europe, with the view of bringing this powerful medicine into notice. A considerable quantity of the oil has been lately imported, per ship Hindostan, from Madras, and consigned to Mr. Short, apothecary, in Ratcliff Highway.—One-third to one-half a drop of the oil, if good, is a full dose.

Madras, May 12, 1822.

MELANGE.

Calcareous Concretions in the Veins.—Several ancient as well as modern authors have related instances where small stones have been found in the veins: in addition to the examples already recorded, Dr. Friedrich Tiedman relates, that he has frequently met with them in the veins of the bladder, the uterus, the vagina, and the rectum. They are found in both sexes, especially in persons of a middle and advanced age; seldom in young people, and never in children. According to the chemical analysis of Professor Gmelin, these stones consists chiefly of phosphate and carbonate of lime, mixed with animal matter: they

do not contain any uric acid whatever. Dr. T. believes that these vein-concretions are formed from the blood itself, in the cavities of the varicose-veins. Whether they are likely to excite any particular morbid effects on the human constitution,—a circumstance which it would be very useful to know,—has not yet been sufficiently ascertained. — *(Medicinisch Chirurgische Zeitung.)*

Calcareous Concretions in the Choroid Plexus.—On raising the calvarium, and cutting through the dura mater, the vessels of the pia mater did not appear gorged, but adequately filled with blood; but, on slicing off the hemispheres, cutting through the centrum ovale, and fully exposing the ventricles, the consequences of a congested brain were too evident, in an immense quantity of serous fluid, and a pultaceous consistence of the cerebral substance; (emollient to a degree of obscuring the subjects of descriptive anatomy.) But what particularly struck me as extraordinary, was the existence of two calcareous concretions, about the size of a pea each, enveloped in the reticulations of the plexus choroidea, where it hangs over the tenia hippocampi, in the descending cornu of the lateral ventricle, one on each side: in this situation, the choroid plexus had the paleness of a maceration in the water of the ventricle.

Although I saw this case when, alas! the symptoms, too firmly established, admitted not of cure; and although the alvine discharges had the usual appearance of a dark green, as is common in such cases; yet it is a question, whether the calculous concretions within the head, or the disturbance of the organs below the diaphragm, where the causes of the inflammation of the brain.—*(Extract of a letter from Mr. Aspray, of Olney, December* 1822.)

Curious affection of the Heart.—Dr. Fisher, of Hildburghausen, relates a case of disease of the heart, in which both the patient himself and also the by-standers, among whom was a physician, could distinctly hear the beating of that organ for six or eight weeks previous to death. They were not only sensible of the noise in the region of the heart, but, on feeling the pulse at the same time, it was observed that the pulsations were simultaneous with it. This noise had a great resemblance to the croaking of a frog, and it could be heard easily at the distance of five or six paces from the patient.

On examination after death, the auriculum dextrum and the vena cava ascendens were found dilated to a considerable size. The right ventricle contained a firm polypus, of about an inch in breadth; one division of which protruded into the auriculum dextrum, the other into the arteria pulmonalis. —*(Medicinisch Chirurgische Zeitung.)*

Cinnabar.—M. Kirchoff prepares cinnabar in the following manner:—Triturate in a porcelain cup, with a glass pestle, 300 parts of mercury with 68 of sulphur, moistened with some drops of a solution of potash, till a black proto-sulphuret is formed; and then add 160 parts of potash, dissolved in an equal quantity of water. Heat the vessel containing the mixture over the flame of a candle or lamp, continuing the trituration without intermission. Add pure water from time to time as the liquid evaporates, that the substance may be constantly covered an inch deep. After two hours continued trituration, a great part of the liquid being allowed to evaporate, the mixture begins to change from black to brown, and then quickly to red. No more water is to be added, but the trituration is to be continued. The mass will acquire the consistence of a jelly, and the red becomes more and more brilliant with great rapidity. When it has attained its highest perfection, the cup should instantly be

removed from the flame, or the red will quickly change to a dirty brown colour.—*(Phil. Mag.)*

Smelling and Tasting.—Anomalous and desultory phenomena, illustrative of the sympathy between the organs of sense, especially between the olfactory nerves and the palate—"if a person be hood-winked effectually, he will with difficulty, if at all, recognise the difference between rum, gin, and brandy; but if, besides having his eyes bound up, the nostrils are closed by pressure of the fingers, all distinction in flavour between these very dissimilar spirits will be confounded. To exhibit this phenomenon in a more effectual manner, the three glasses of spirits ought to be presented successively to the person upon whom the experiment is to be made, who ought to sip of each before he is called upon to decide upon them singly; then put him to the proof by giving him the glasses over again, and he will be found so entirely at fault, that if he makes the experiment a dozen times he will in all probability, not pronounce correctly above three or four times, and that will be purely accidental."

On the Discovery of Acids in Mineral Substances. By J. Smithson, *Esq. F.R.S.*

(Continued from page 207.)

M. Gay-Lussac has observed that a solution of boracic acid in an acid changes the colour of turmeric paper to red, like an alkali. Borax, to which sulphuric acid has been put, does so, and the same is of course the case with a bead of soda containing boracic acid.

The most certain test of boracic acid in a soda bead, &c. is to add sulphuric acid to it, and then spirit of wine, whose flame is coloured-green, if boracic acid is present.

5. *Arsenical Acid.*—Alkali containing it produces a brick-red precipitate with nitrate of silver.

6. *Chromic Acid.*—Chromate of soda and its solution are yellow, and so is the precipitate with lead. That with silver is red.

Chromate of soda or potash fused on a plate of clay leaves green oxide of chromium.

Chromate of lead fused on a plate of clay produces a very dark-green mass, which is probably chromate of lead; with an addition of lead, it forms a fine red, or orange glass.

Lead added to the green oxide left by chromate of soda on the clay plate, dissolves it, and forms an orange-coloured glass.

The green oxide of chromium sometimes acts the part of an acid. I have seen a combination of it with oxide of lead found in Siberia, in regular hexagonal prisms, having the six edges of the terminal face truncated (Haüy, pl. lxviii. fig. 63); melted with lead on the clay plate this would undoubtedly produce the orange glass; and fused with nitrate of potash it would form chromate of potash.

7. *Molybdic Acid.*—If molybdate of soda or potash, or, I apprehend, any other molybdate, is heated in a drop of sulphuric acid, the mixture becomes of a most beautiful blue colour, either immediately, or on cooling.

The solution of molybdate of soda in sulphuric acid affords with martial prussiate of potash, a precipitate of the same colour that copper does. Tincture of galls gives with this acid solution a green precipitate; but with an alkaline solution of molybdic acid galls produce a fine orange precipitate. If an alkali is put to the green precipitate, it becomes orange; and if an acid to the orange precipitate, it becomes green.

8. *Tungstic Acid.*—If tungstate of soda is heated with sulphuric acid, the granules of precipitated tungstic acid becomes blue, but not the solution; and the phenomena cannot be confounded with those presented by molybdate of soda. Martial prussiate of potash has no effect on this acid liquor.

(To be continued.)

PROCEEDINGS OF PHILOSOPHICAL SOCIETIES.

Royal Society.

March 20.—At this meeting the reading of the following paper, which had been commenced on the 13th, was resumed and concluded.

Of the motions of the eye, in illustration of the uses of the muscles of the orbit. By Charles Bell, Esq. (Communicated by the President.)

In this paper the author enters upon an examination of the motions of the eye, and the classification of the muscles according to their offices. This is done for the purpose of explaining the uses of the six nerves which enter into the orbit, and in pursuance of his former papers on the nervous system.

His object in this paper is to show, in the first place, that there are motions performed by the eye not hitherto noticed. Every time the eyelids descend to cover the transparent part of the eye, the eyeball ascends, or suffers a revolving motion. If this were not the case, the surface of the eye would not be moistened, nor freed from offensive particles. He proves, in the next place, that when we fall asleep, the eyeball is turned up, and the cornea lodges secure and moistened by the tears, under cover of the upper eyelid. He shows that these motions are rapid and insensible, and that they are provided for the safeguard of the eye. The other motions are voluntary, and for the purpose of directing the eye to objects. He then proceeds to the examination of the muscles of the eyeball, distinguishing them, as usual, into the straight and oblique muscles. It has been supposed, hitherto, that both these classes of muscles were voluntary; some describing the oblique muscles as coadjutors of the recti, and others as opponents to the recti; but Mr. Bell maintains that the obliqui are provided for the insensible motions of the eyeball, and the recti for those motions which are directed by the will, and of which we are conscious.

(To be continued.)

Royal Academy of Sciences and Arts, Paris.

Dec. 2, 1822.—The following memoirs were read:—On animal heat, by M. Doulong.—On the use of bronze in the making of medals, by M. Puymauzin, Jun.—On the triple compounds of chlorine, by M. Despretz.

Dec. 9.—M. Cuivier read a note on the Rhinoceros of Africa, lately described in the Philosophical Transactions, and on the head of a fossil Rhinoceros found near Montpellier.—M. Fresnel read a memoir on the particular kind of double refraction, which light experiences as it traverses rock crystal in a direction parallel to the axis.

Dec. 23.—M. Desmoulins read some observations on the connexion between the strength of the sight, and the extent of optic nerves and the retina.

DR. GALL.

In our last Number, we not only announced the arrival of the celebrated Dr. Gall, (the author of the *System of Phrenology*) in London, but we expressed a hope that he would, before leaving us, demonstrate his discoveries in the brain by dissection, explain the different organs, and illustrate the application of this science to education, morals, and criminal jurisprudence. We are happy to find that our hopes were not ill founded—Dr. G. has already announced his intention to this effect, and has published his address, (No. 65, Frith Street, Soho) where every particular on the subject may be acquired.

Preparing for the Press, and shortly will be published, a Treatise on the Art of Cupping by Mr. Bayfield, cupper to Guy's Hospital. From the long experience of the author, this work may not be unacceptable to the profession.

TO CORRESPONDENTS.

Several Communications came too late in the week—they will be noticed or acknowledged in our next.

It is understood that Dr. Gall's forthcoming Lectures will be delivered in French: however this may be, the substance of them, &c. will be regularly inserted in English, in this Magazine, from the term of their commencement, &c.

Further particulars are requisite relative to the Tying of the Subclavian Artery, at Lynn, in Norfolk, before we can give it a tangible shape.

Communications, advertisements, &c. &c. addressed for the Editors, at the Publishers, &c.

London:
Printed by E. JUSTINS, 41, *Brick Lane, Spitalfields.*

Published by COX and SON, St. Thomas's Street, and 39, High Street, Southwark. Sold also by Sherwood, Neely, and Jones, Paternoster Row; Simpkin and Marshall, Stationers' Court; Callow and Wilson, Princes' Street, Soho; John Cox, Berner's Street, Oxford Street; E. Willson, Corner of Royal Exchange; Chappel, Cornhill; W. Turner, Cheapside; T. Boys, Ludgate Hill; H. and W. Smith, 192, Strand; G. Roake, 31, Strand; W. Sams, St. James' Street; W. Stewart, South Bridge Street, Edinburgh; Hodges and M'Arthur, Dublin; &c. &c.

THE WEEKLY

MEDICO-CHIRURGICAL & PHILOSOPHICAL MAGAZINE.

No. XV.] SATURDAY, MAY 17, 1823. [*Price* 4*d.*

" FLORIFERIS, UT APES, IN SALTIBUS OMNIA LIBANT
OMNIA NOS, ITIDEM, DEPASCIMUR AUREA DICTA."

TIEDEMANN ON THE FŒTAL BRAIN.*

The object of Professor Tiedemann has been, to prove that the brain of the embryo is by no means the complicated organ we observe in the adult, but, that originally, extremely simple, it is gradually developed, either by the additions of new parts, or by the increase of those already existing; he, at the same time, attempts to demonstrate that the laws, by which the formation of the brain in the human embryo, and in the lower animals is regulated, are precisely the same. With these views, he has compared the encephalon of the fœtus at various periods, with the state of that organ in various animals, and has shown, that in all its stages it corresponds to various individuals in the animal scale, and that its simplest condition, at the earliest periods of existence, is precisely that met with in the lowest animals.

The first object demanding our attention is his description of the canal of the medulla spinalis. According to him, the spinal cord contains a canal communicating with the fourth ventricle, by means of the calamus scriptorius; the margins of this canal, at first soft and floating, become adherent in the third month, and the tube thus formed, progressively diminishes in size, in proportion as the pia mater, by which it is covered, secretes more cerebral matter. In the adult, some traces only of it remain in the upper part of the spinal cord. Dr. Tiedemann distinguishes this canal from those which Gall describes, as passing through the crura cerebri, and reaching to the optic thalami; he denies their existence, and attributes them to artificial inflation: the canal he has described, though obliterated in the adult human subject, always remains pervious in birds, reptiles, and fishes.

Dr. Gall has asserted that the spinal cord is composed of ganglia of cortical matter, corresponding in number with the spinal nerves. Tiedemann observes, that were this the case, these ganglia should be particularly distinct in the uncompleted embryo, in which, on the contrary, the spinal cord presents nothing resembling ganglia.

In opposition also to Gall, he asserts, that the cortical matter is not the matrix of the nerves, but that, on the contrary, it is formed after the medullary matter, and that the origins of the spinal and cerebral nerves are visible before the least trace of it appears. He allows that the cortical matter is most abundant, where the largest nerves arise, and that at the earliest periods, the spinal cord is wider, and its canal larger at the origin of the nerves of the upper and lower extremity.

The continuity of the medulla oblongata with the crura cerebi, is, according to Professor Tiedemann, an incontestible fact. He shews that the *pons varolii* is not formed until the fourth month, and that, before that time, nothing interposes between the crura and medulla oblongata: each of the two cords composing the

* Anatomie und Bildungs—Geschichte des Gehirns des Fœtus in Menschen, &c. Bei F. Tiedemann der Anatomie und Zoologie zu Landshut, Professor, 4to. Leipzig.

medulla spinalis divides in the medulla oblongata, into three smaller ones; of these, the inner or pyramidal, placed on the outside of the longitudinal groove of the spinal marrow, forms, in the fourth month, a large flat surface, as in birds, reptiles, and fishes; the pyramidal prominences do not appear until the fifth month; its decussation, with that of the opposite side is visible in the fourth or fifth week. The middle cord, or cord of the *corpus olivare* is placed over the former, some of its fibres ascending to the *tubercula bigemina*, and uniting with those of the opposite side, to form the *aqueductus Sylvii*, whilst the remainder proceed to the *thalami optici*, where they meet with the fibres of the first cord, of the *corpus pyramidale*. The corpora olivaria do not appear externally until the seventh month. The external cord, or that of the *corpus retiforme* arises from the lateral and posterior part of the medulla and sides of the ventricle, and then penetrate the cerebellum. The *thalami optici* are formed by the union of the fibres of the first and second cords, that is, of the *corpus pyramidale* and *olivare* on each side. From the side of each *thalamus* some fibres are detached towards the *corpus mamillare;* the remainder are continued from behind forwards and from within outwards, through the *corpus striatum* into each hemisphere. The hemispheres of the brain are membranous expansions reflected on themselves from without inwards, and from before backwards. The truth of this assertion is evident in the second month, when the hemispheres present two absolute, but delicate membranes produced by the expansion of the crura cerebri, and which are unconnected at their inner and posterior margin. The increase of the *pia mater*, and the deposition of new strata effect the increase of the parietes of the hemispheres. It is by means of this circumferential radiation or deposition of nervous fibres that Professor Tiedemann explains the formation of the circumvolutions, which do not appear until the seventh month. Gall, on the contrary, supposes that they arise from the folding of the membrane originally composing the hemisphere.

Tiedemann asserts, that the method employed by that author to demonstrate the unfolding of the convolutions, produces invariably the rupture of the inner layer of fibres detached inwards from the outer side of the crura cerebri, and that it is quite inconclusive.

He denies also the existence of a set of fibres converging and forming the commissures in the manner supposed by Gall, who described them as arising from the grey matter of the convolutions, and decussating those which originate from the crura cerebri. According to Tiedemann the *corpus callosum*, one of these commissures, exists in the fourth or fifth month, a period when the brain presents neither convolutions nor grey matter; it is in fact formed by the union of the fibres arising from the crura cerebri, which, when they have acquired a sufficient length, are connected transversely with those of the opposite side. Hence, although not existing in the first months, it gradually increases in proportion as the fibres of the hemispheres are elongated, and is formed from before backwards.

(*To be continued.*)

MEMOIR.

(Continued from page 213.)

With respect, farther, to the opinion of these anatomists that the fibres of each convolution do not unite into one fasciculus, like those of the optic or auditory nerves, but form two distinct layers which touch each other in the median line of each convolution, and are slightly agglutinated together by means of a mucous neurilema, Dr. Gordon denies both the accuracy of the description, and the existence of any such mucous neurilema. With Reil, he maintains, that the con-

volutions are composed of many laminæ, and with the French Commissioners he asserts, that the separation of these laminæ in each convolution can be effected as easily on either side of the median line, as in that line itself; and that all the laminæ, which may be so separated, exhibit precisely the same fibrous appearance. He farther contends, that the experiments of blowing air on the convolutions, or projecting water on them, in the manner proposed by Gall and Spurzheim, and which were said to produce a separation in the median line, and in that only, are quite incorrect; for that, under these operations, the laminæ separate as easily on either side that line as in it,—as was practised, in Dr. Spurzheim's presence, both on the recent and prepared brain, during his second demonstration. It follows, therefore, 'from the hypothesis of Drs. Gall and Spurzheim that the convolutions of the cerebrum or brain-proper are composed, each of two layers of fibres and no more, joined together in the middle by a *mucous neurilema*, is not only illogically deduced from experiments and observations imperfectly or inaccurately made, but is directly at variance with facts which are of easy demonstration.'

As the condition of the brain in hydrocephalus is said to have first excited Drs. Gall and Spurzheim to a particular examination of the structure of the convolutions; so, in its turn, the anatomical hypothesis thence derived is brought to explain the state of the brain in that disease, and the manner in which it has been accomplished. The disease called Hydrocephalus, or Dropsy of the Brain, consists, as is well known, in an effusion of fluid into the ventricles of that organ. In their natural state, these cavities contain little or no fluid of any kind; and as, in their healthy condition, they cannot be made to contain more than two or three ounces of liquor, it is obvious, that, when the quantity effused increases, as it sometimes does, to several pounds, the ventricles must be morbidly enlarged to receive it. Sometimes this enlargement of the ventricles is not accompanied with any enlargement of the external dimensions of the brain, but frequently it is, and then the cavity of the cranium is proportionally increased. In the latter case, the convolutions of the cerebrum are observed to become broader, but less deep; they preserve, however, even when much thinned, their internal solidity. The fossæ between them are as narrow as at first; nor is there any rupture of the vessels of the *pia mater*. The process of enlargement sometimes goes on, until, at length, the form of convolution disappears altogether, and there remains only as a wall to the enlarged ventricles, a stratum of white substance, not thicker perhaps than the eighth part of an inch, with a layer of brown matter superposed. In some instances, the progress of the disease is arrested at this point, and the individual lives many years with the brain in this state. In other instances, the disease proceeds until the thin remaining expansion of white and brown matter, forming the vault and sides of the ventricles, vanishes also.

Previous to the knowledge at present possessed of the functions of the absorbent system, Pathologists very generally considered this condition of the brain in hydrocephalus to be produced by the distending force of the water progressively effused into the ventricles, of which Dr. Gordon has afforded ample proof, by extracts from the Works of Vesalius, Tulpius, Petit, Hunauld, and Morgagni. This doctrine of mechanical distention is revived by Drs. Gall and Spurzheim, who profess farther to have discovered the mode in which it is made to act. They maintain, that the brain is in no case disorganized or destroyed, but that the fluid accumulated in the ventricles, by the exertion of a gentle, but constant and regular force, acts on the convolutions till their duplicatures are unfolded and transformed into a kind of membranous expansion, white and smooth within, and covered externally by grey matter. This action on the convolutions is said to commence at the bottom, where each duplicature of them may be easily separated into two layers; and their fibres, which at first were vertical, are then said to assume a horizontal position.

(To be continued.)

DOCTOR PARIS ON ANTIDOTES.

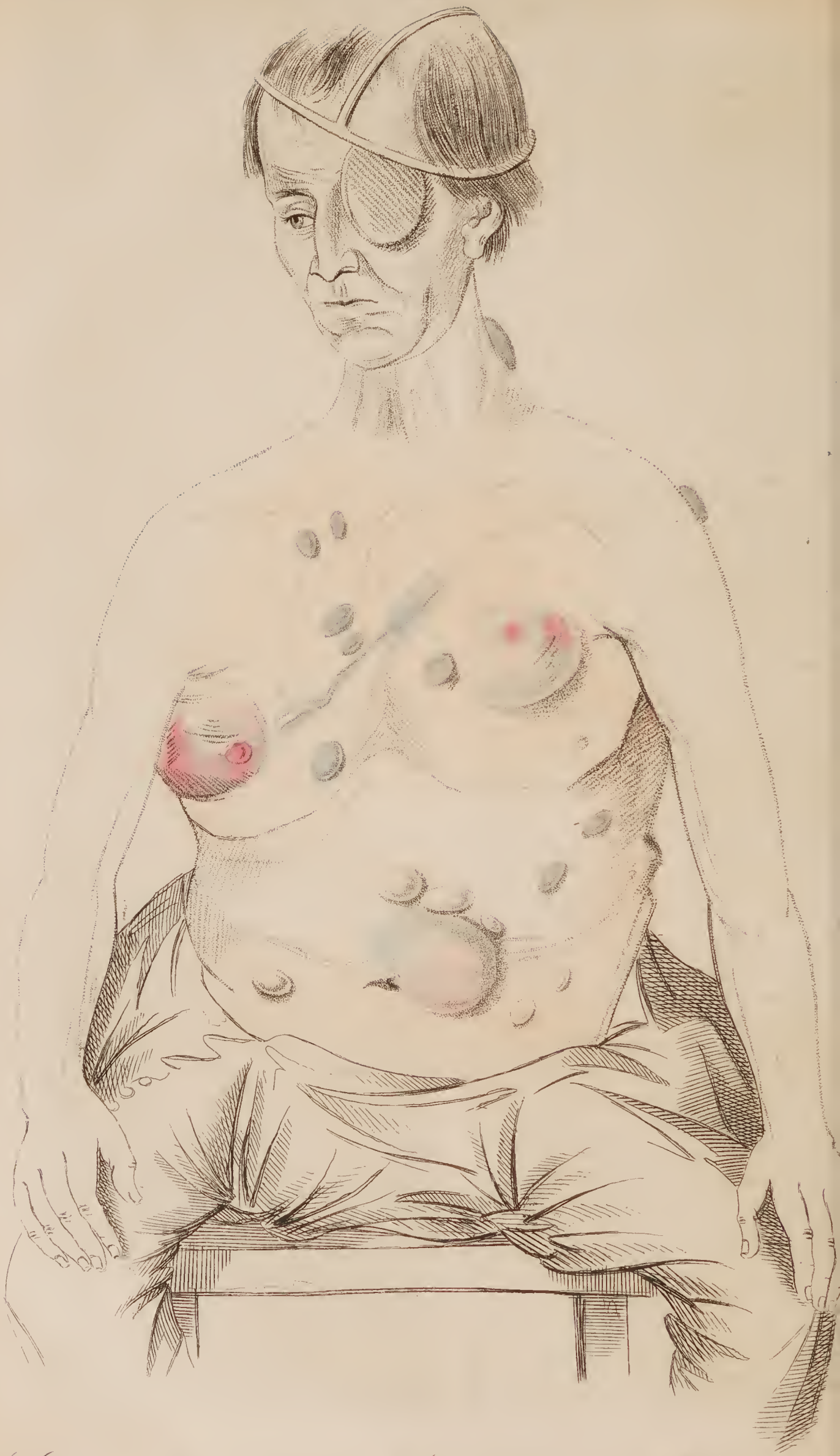
(Pharmacologia, 5th Edition.)

Poisons differ materially from each other, not only with respect to the modes in which they produce their effects in relation to the several vital organs, but with respect to their application. Some of those, for instance, which are speedily fatal if introduced into a wound, may be taken into the stomach with complete impunity,—as in the instance of the venom of the viper and other snakes, which appears to exert no influence on the stomach: others, on the contrary, display their deleterious action

on the stomach alone,—such as caustic acids and alkalies, corrosive sublimate, and other chemical poisons: while others, again, are equally destructive, whether applied to the inner surface of the stomach, or to the lower intestines, in the form of clyster, or even to the mucous membrane of the mouth or nose; to the eye; to the vagina and orifice of the uterus, or to an abraded portion of the skin. There is, moreover, a class of substances which may be termed *aërial* poisons; for they may exist in the state of gas, or held dissolved in the atmosphere, and be received by respiration, or by the mucous membranes of the nose and throat; the saliva may also thus become the medium for transferring various subtile poisons from the atmosphere to the animal body. This is well illustrated by the fact of the transfer of metallic influence, as related in the case of a gentleman in perfect health, who became salivated in consequence of sitting for one hour by the side of a person who was in a state of mercurial ptyalism, in order to give him a lesson in botany.

It also deserves notice, that a poison acts with different degrees of force and celerity in different parts of the same tissue: its absorption, for instance, would appear to be energetic in proportion to the number of veins, although several apparent exceptions to this law might be adduced; and it is evident that the plethoric state of the part, with respect to its blood-vessels, has a considerable share in modifying the effects. This observation, however, has no relation to those poisons which operate on the system through the sympathetic communication of the nerves. Mr. Brodie, for instance, found that the poison of bitter almonds acted more speedily when applied to the tongue than when injected into the intestine, though the latter presents a much better absorbing surface.

Foderé, in the fourth volume of his Médecine Legale, arranges poisons according to their action on the living system, and which, with a slight alteration in the order of the classes, has been adopted by Orfila, and most other writers on Toxicology. Poisons are thus reduced into six classes: viz. —1. *Corrosive or Escharotic*, as the preparations of mercury, arsenic, antimony, copper, tin, zinc, silver, gold, and bismuth; the concentrated acids, and caustic alkalies and earths; cantharides; glass and enamel powder. 2. *Astringent Poisons*, of which the preparations of lead constitute the only species. 3. *Acrid or Rubefacient Poisons*, which, with a few exceptions, are furnished by the vegetable kingdom, as certain drastic purgatives, hellebore, euphorbium, &c. 4. *Narcotic Poisons*,—opium, henbane, the cherry-laurel, stramonium, &c. 5. *Narcotico-Acrid*, embracing such articles as produce the united effects of the two former, and which constitute some of the most deadly poisons, as the ticunas, nux-vomica, belladona, tobacco, hemlock, digitalis, &c. 6. *Septic Poisons*,—contagious miasmata, putrid exhalations from animal matter, sulphuretted hydrogen, the venom of the viper, &c. If we are to found our classification upon views strictly pathological, the above arrangement is perhaps as eligible as any that could be proposed, and it has certainly the obvious advantage of bringing together those individual substances which occasion effects somewhat analogous upon the living system; and yet such a plan will not enlighten our therapentical doctrines. Arsenic and corrosive sublimate are, for instance, both corrosive poisons, but they differ from each other materially in their physiological action; and, when swallowed, require, for the preservation of the individual, a very different system of treatment. It is from the views of their physiological and chemical action that our curative indications are to be chiefly derived; and



Engraved for the Weekly Medico-Chirurgical Magazine.

the able and interesting researches of Mr. Brodie enable us, in a very satisfactory manner, to construct an arrangement by which the treatment of poisons may be at once rendered more efficacious and simple: thus poisons may be said to act—

I. Through the medium of the nerves, without being absorbed.

a. By destroying the functions of the brain.—Alcohol. Essential oil of almonds. Juice of aconite. Oil of tobacco. Opium?

b. By rendering the heart insensible to the stimulus of its blood. —Infusion of tobacco.

II. By entering the circulation, and acting through that medium, with different degrees of force, on the heart, brain, and alimentary canal.

Arsenic. Emetic tartar. Muriate of baryta. The woorara, and all poisons which act by external application, as the venom of the viper, &c.

III. By a local action on the mucous membrane of the stomach.

Corrosive sublimate of mercury. Acids and alkalies. Mechanical irritants, as diamond dust? powdered glass?

(To be continued.)

HOSPITAL REPORTS.

GUY'S HOSPITAL.

Case of Fungus Hæmatodes.

In our last Number, (page 213) we gave a brief account of the subject, of whom our plate this week is a well executed representation. In addition to these particulars we have since been favoured with the following, taken from actual observation, and verbatim from the patient's own mouth.—We have already stated the name of the patient, (Edward Roper) who is about 54 years of age, thin habit, has enjoyed good health until about seven years ago, when he received a hurt over the left eye while tying up wheat: in consequence of which inflammation and swelling ensued, but subsided, leaving, however, behind, dimness of sight, which increased, till it terminated about three years ago, in total blindness of the same eye.

The patient's body, in his present state, is covered with tumours of various magnitudes. The largest, which is situated to the outer side of the right breast, has existed three years; its size is that of a very large orange. The character of these tumours are evidently of the nature of those termed fungus hœmatodes; are extremely vascular and prominent, yielding to the touch, and not accompanied with much pain, decreasing in magnitude, on every part of the body, to the size of a pea. Their situation is principally confined to the trunk, both before and behind; but they are also extended to the neck, on which there is one of considerable magnitude, and even to the arms and thighs.

The left eye, of which the patient, as we have already stated is blind, is evidently affected with the same disease, shewing itself at the outer edge of the sclerotic coat; pupil closed, and thrown inwards towards the nose; the whole of the eye rather prominent.

The patient is a married man, has five children, all of whom enjoy good health: his father died at the advanced age of 73;—his mother is now living, aged 78. Had a brother who died of phthisis; and a sister who never had any children, although twice married. Was born at Inglesby; but has resided lately at Butterwick, near Lincoln.

The late Mr. Hey, of Leeds, has given a variety of cases of this disease; and probably was the first to designate it by its present name. To Hey's Surgery then we must refer the readers, whilst we content ourselves at present, with laying before them the following historical sketch

of the disease collected from the same author.

" I have seen several cases of this disease," observes our author, " of which I have given no account in this chapter;" alluding to case tenth, of Mary Wood, where Mr. H. supposed that the disease originated in the bone, or at least within the periosteum, and suggested the propriety, in similar instances, of opening the tumour on its first appearance, &c. " and have not been able to affect a cure in any instance, but by amputation of the limb, where the seat of the disease was in the extremities.

" If I do not mistake, this disease frequently affects the globe of the eye; causing an enlargement of it, with the destruction of its internal organisation. If the eye is not extirpated, the sclerotes bursts at the last; a bloody sanious matter is discharged, and the patient sinks under the complaint. When the disease occupies merely the adipose or cellular membrane, lying upon the surface of the muscles, the tumour is not usually painful in its beginning; nor does it impede the motion of the muscles on which it is seated. But when deeply seated in the limbs, it causes pain and weakness of the part affected. The fungus, as it increases in bulk, does not render the integuments uniformly thin, as in the case of an abscess. In one part, the tumour, when pressed with the hands, will afford the sensation of a deep-seated fluid; while in auother part it feels hard and uneven. In an advanced stage of the disease, the integuments, and farcia of the muscles (if the fungus be situated beneath the part) are burst open; and the fungus which rises through the aperture sometimes appears black, like a mass of coagulated blood. At other times the appearance more resembles an excoriation. Under both these circumstances hæmorrhages ensue. In this process, the integuments do not become uniformly thin, and of a red colour, as when purulent matter is making its way; but they continue to feel as thick as usual round the fungus that has burst through them.

" The fungus is an organized mass and bleeds wherever it is broken.

" When the parts containing the fungus are divided, they are found to be in a morbid state. The adipose membrane forms a great number of pouches, filled with the fungus; upon the removal of which the pouches bleed copiously from every part of their internal surface.

" Wherever the fungus comes in contact with the muscles, they lose their natural redness and become brown. They also lose their fibrous appearance; and cannot in every part be distinguished from the adipose membrane, though a distinction is in general evident."

According to Mr. Hey, the growth of this fungus cannot always be repressed by the strongest escharotics. Neither hydrargyrus nitratus ruber—the hydrarg. muriatus—the antimon. muriatum, nor the undiluted vitriolic acid, have been sufficient for this purpose.

ST. THOMAS'S HOSPITAL.

May 16.—Mr. Tyrrel performed the operation of the lithotomy on a young male subject, (about 14 years of age) and extracted, after some little difficulty in obtaining a hold, an oval formed calculus about two inches in length, and one inch and a quarter in breadth, and nearly half an inch thick.

ACCOUNT OF BARON HALLER'S SYSTEM OF PHYSIOLOGY.

In this work all the parts of the human body are described; we have there an opportunity of examining the opinions which have been recommended, or at least advanced, by celebrated authors, who have attributed different uses to the same parts.

M. de Haller did not always decide between these opinions; sometimes he proved that they ought all to be rejected. Nothing of importance that had been previously published, escaped his observation, and he almost uniformly added remarks of his own to the intelligence he had obtained from books.

We shall not here enter into the immense detail of errors which Haller has destroyed in physiology; of new facts which he has added; of the ingenious and deep views which he has opened; of the doubts he has cleared up, or of the theories he has perfected or reformed: this would be to copy the whole of his work. We shall confine ourselves chiefly to those subjects, on which he has drawn every thing from his own proper fountain, viz. generation, the formation of the bones, and irritability.

His numerous experiments which have generation for their object, were made on birds. The facility of examining their eggs, at almost all hours of their incubation, presented him with advantages which he could not have found, had he made his inquiries on any other kind of animals. He traced the formation of the chicken, from the instant in which the first change in the egg is perceived, and the vital speck begins to dilate, to that when the little animal quits the shell in which it has been formed. He saw, if we may use the expression, the organs successively spring up before his eyes, acquire life and motion; saw them transformed and perfected; assume the several dispositions allotted to them in the animal; and beheld the arteries and veins unfold themselves. The vessels of the growing chicken are confused and form a continuity with those of the yolk of the egg; and as these vessels of the yolk are observable in eggs which are unimpregnated, M. de Haller thought himself warranted to conclude that the chicken existed ready formed in the egg, previously to its impregnation. He was equally assured that the fœtus is also wholly formed in the females of oviparous animals: and he regarded this observation as a conclusive proof in favour of the system, of the successive developement of germs. He however, perhaps, regarded it as a mere probability; and would not have divested himself of that wisdom which rendered him inaccessible to the spirit of system, if he had not been inspired with a secret propensity to this opinion, by reasons of a different kind.

He apprehended that the production of an animal, by means purely mechanical, would destroy one of the proofs of the doctrine of providence. But is it not sufficient for those who search, in nature, for proofs of this doctrine, that the phenomena are regulated by certain laws, whatever these laws may be? Is it not the crystallisation of a salt, which constantly assumes the same form, a phenomenon as admirable as that of the generation of animals? In short, the laws which act upon matter, being equally constant, and the phenomena resulting from them uniformly offering the same regularity, whatever system we employ to explain them, is it not in the wisdom and goodness which the whole of these phenomena announce, and not in the nature of the powers they produce, that we ought to look for proofs of the existence of a superior Being?

It may appear more singular that M. de Haller should believe religion or morality to be interested in the opinions of philosophers, concerning the formation of organised beings, as he had attacked, in his dissertation on monsters, the identical metaphysical reasonings, which he has since employed in favour of the developement of germs; and he himself had proved, as we shall

presently relate, that the repose of a philosopher may be disturbed by these trivial charges, which are often too wantonly made, and easily admitted.

In the experiments on ossification, M. de Haller traces the progress of the growth and solidity of the bones in oviparous animals. He then examines the formation of a callus in the bones of adult animals. He thought he had discovered, in his experiments, that the bones are, at first, a jelly of a thin consistence, but organised and formed of vessels, originally imperceptible to the sight, as being transparent and filled with a colourless liquid. This jelly afterwards assumes a more solid form: the vessels become visible, and it at last ossifies, by the blood of the arteries, which pass through it, depositing in it an earthy matter.—According to his opinion, the periosteum contributes nothing to ossification, because it has a different organisation from that of the bones; because some bones have no periosteum, and this membrane is covered by callusses or osseous productions; and lastly, because in a fœtus, the bones at the time they become solid, have no adhesion to the periosteum.

These opinions of Haller differ from those of Duhamel, who explains the formation of the bones by supposing a successive ossification of the membranes of the periosteum. Indeed some of M. de Haller's experiments would appear difficult of explanation, if we were to adopt the theory of M. Duhamel. Nor is it less difficult to account, on Haller's system, for the formation of bony lamina, and especially for the alternate red and white strata, which are observed in the bones of animals fed, sometimes with their common food, and sometimes with the same food mixed with madder; so that these two opinions, both of which are founded on experiments, and advanced by philosophers distinguished for their aversion to systematic ideas, have divided, and still continue to divide, physiologists.

By irritability, M. de Haller means, that property, which certain parts of living bodies possess, of contracting when wounded, or even when touched, independently of the will of the animal that is the subject of the experiment, and without its feeling any pain. A property, which plants seem also to partake, and which being distinct from sensibility, does not depend on the same organs. He endeavours to prove, that irritability resides exclusively in the muscular fibres, and sensibility in the nerves: he demonstrates how, in the different parts of the body, almost all of which are mixed with muscles and nerves, the sensibility, they shew, depends on the nerves, and their irritability on the muscles; that those parts which are destitute of muscles are not irritable, and those that are destitute of nerves are not sensible; that if the nerves be divided, which unite any part to the brain, the sensibility of the part will be lost, while its irritability will remain. The nerve, when separated from the brain, ceases to contract; it only preserves an appearance of motion, because it may serve as a foreign body to excite irritability in the muscle to which it belongs. On the contrary, a muscle, though separated from the living body, still retains signs of irritability; but the power of it is diminished, and ceases in a very short time. He cautions against confounding irritability with elasticity, which is a property purely mechanical, and teaches to distinguish the motions which irritability produces, from those merely chemical changes which the application of caustics induces in all the soft parts of organised bodies.

On the Use of the Whiskers in Feline and other Animals. By S. D. Broughton, *Member of the Royal College of Surgeons, &c. &c.*

It may not, perhaps, be generally known that, as far as they have been traced, the whiskers which adorn the upper lip in tygers, panthers, leopards, cats, seals, &c. are very copiously supplied with nerves; and altogether in a manner which precludes the possibility of our considering them as merely ornamental appendages.

After macerating the head of a stout cat, and carefully dissecting the face under clear water, I could distinctly trace large branches of nerves pervading the fatty cushions on which the whiskers grow, and sending separately to each bulb or root a filament of the size of a strong thread. These appeared to come from the second branch of the fifth pair, and they were lost in the substance of the bristle. In the Hunterian Museum of the College of Surgeons, a similar developement of nerves is exhibited in the seal.

So large and particular a distribution of an exquisitely sensible nerve, it is reasonable to suppose, must be for the purpose of some sensible function. To ascertain this, I put it to the test of experiment in the following manner:—

I placed walls of books upon the floor, so as to resemble the streets of a town opening into each other; and, having closed the eyes of a kitten completely, I set it down to find its way through the lanes of books. It continued to move on wherever a free communication presented itself, holding its head cautiously down close to the floor, and very adroitly avoiding contact with the sides of the walls, the corners of which it also turned without approaching closer than just sufficient to touch the tips of the whiskers slightly, when it always drew back instantaneously. At length it found its way out freely; and I then cut off the whole of the whiskers close to the face, and again set it down, to observe whether this would produce any alteration in its manner. The kitten now showed evident signs of having lost the only remaining means of guiding itself. It struck its head repeatedly against the sides of the walls, run against all the corners, and tumbled over steps placed in its way, instead of avoiding all these as before the removal of the whiskers.

Not the slightest sensation of pain appeared to attend the cutting of the bristles; I should therefore suppose that their substance is insensible, and that it carries on the impressions it receives by vibration, their sensation being propagated through the nerves inserted in the bulbs of the bristles.

In the mouse, I found also a similar developement of nerves, proportionably large, in relation to its whiskers.

From these facts, I imagine that certain animals are supplied with whiskers for the purpose of enabling them to steer clear of opposing bodies in the dark. The mammalia, having lips and considerable facial developement, are probably furnished with these bristles, or fine tubes of a compact substance, which, whilst they readily yield to pressure, convey the impression and excite the simple sensation of contact; just as the antennæ of the sepia, the lobster, the snail, insects, &c. are to all appearance constructed, for the purposes of the sense of touch.

Animals which seize their prey by night, and such as explore dark passages, are furnished with whiskers. The bat is supposed to avoid walls and houses by the exquisite sensibility of its wings: it seems, however, probable that it is indebted for its safety in this respect to its whiskers, or feelers, as they may be termed.

CHEMICAL ANALYSIS.

Analysis of Uranite.

This mineral has been analyzed, both by Mr. Gregor and Berzelius; the latter philosopher found it to be "a compound of oxide of uranium with lime and water; in fact, a true salt, with a base of lime, in which the oxide acts as an acid;" and he considers the Cornish variety as containing an accidental admixture of arseniate of copper.

Mr. Phillips has lately re-analyzed this mineral, and very unexpectedly finds it to contain phosphoric acid; indeed, to be a phosphate. A specimen from Cornwall gave,

Silica	0.5
Phosphoric acid	16.0
Oxide of uranium	60.0
Oxide of copper	9.0
Water	14.5
	100

or, neglecting the silica,

Phosphate of uranium	73.2
Phosphate of copper	12.3
Water	14.5

Native Phosphate of Alumina.

A substance has lately been placed in the hands of M. Vauquelin, for analysis, which proved to be phosphate of alumina. It was brought by M. Debassyns from the Quartier Saint Paul, Isle Bourbon, being found in a volcanic cavern, occurring in a large basin, formed by the river Saint Giles, and known in the country by the name of the Blue Basin.

No one had before entered the cavern, which is very deep and irregular, and covered with stalactites. After a few steps, there are found considerable portions of the white earth, deposited against the sides; and it occurs in proceeding, until replaced by a black earth, which, in certain places, forms the entire bottom of the cavern, and preserves the form of the blocks of lava, which appear to have fallen from the roof.

The white earth has a slight tint of yellow, no consistence, and is very light; it feels unctuous, and adheres to the tongue. On analysis, it proved to be a subphosphate of alumina, mixed with a small quantity of phosphate of ammonia.

1.400 Alumina.
0.914 Phosphoric acid.
0.094 Ammonia.
Water.

The black matter found in the cavern was almost entirely animal; five parts gave only 0.35 of ashes when burnt, which were phosphate and carbonate of lime, with a little iron. In the same cavern were found heaps of bones, which, from a specimen brought home, appeared very ancient. The specimen was very fragile, and was covered with crystals, in brilliant needles, which proved to be phosphate of lime. M. Vauquelin suggests that this animal matter was the source of the phosphoric acid, found united with the alumina.

Crystallized Stalactitic Quartz.

The stalactites which covered the roof of this cavern, when examined by M. Vauquelin, proved to be quartz. They were found in concentric layers, and offered all the physical characters of calcareous stalactites, except the hardness. The composition was,

Silex	850
Oxide iron	060
Lime	031
Water	150
Loss	009
	1.100

Ammonia in Lava.

Professor Gmelin, of Tubingen, is said to have discovered, in clinkstone lava, ammonia, which is disengaged by distillation. He has also found it in columnar basalt.

Muriate of Ammonia from Coal Strata.

There is a coal-mine near Saint Etienne, which, having been fired, through inadvertence, has now been burning for several years. Besides the usual products arising from the

combustion of coal, it exhales a great quantity of muriate of ammonia. Fumes arise from the burning surface of the ground, which condense into the solid salt, and in dry weather the whole surface is covered with it. Some very fine specimens were found within an inhabited house; and so abundant was the production in the years 1818 and 1819, that many pieces were separated from the walls, weighing above 2lbs. avoirdupois. The ruins of this house, treated in the large way for the separation of the salt from them, gave such results as would have proved lucrative, if pursued.

In referring to the probable source of this salt, it is remarked, that the water of all the wells on this coal stratum contain, among other salts, a very notable quantity of earthy muriates.

Analysis of the Mineral Waters of Carlsbad. By M. Berzelius.

These waters deposit a calcareous tufa, of a striated crystalline texture, which possesses all the characters of arragonite. Professor Stromeyer's discovery, that arragonite always contains strontian, induced M. Berzelius to search for that earth in this tufa, and in the waters by which it is deposited; and he has succeeded in finding a small quantity of it in both. The following is the general result of his analysis of the waters of the principal spring, called the *Sprudsl.*

In 1000 parts of the water, there are of

Sulphate of soda	2,58714
Carbonate of ditto	1,25200
Muriate of ditto	1,04893
Carbonate of lime	0,31219
Fluate of ditto	0,00331
Phosphate of ditto	0,00019
Corbonate of strontian	0,00097
Carbonate of magnesia	0.18221
Phosphate of alumina	0,00034
Carbonate of iron	0,00424
Silica	0,07504
	5,46656

With traces of carbonate of manganese.—(*Ann. de Chim. et de Phys.* xxi. 246.)

On the Discovery of Acids in Mineral Substances. By J. Smithson, *Esq. F.R.S.*

(Concluded from page 223.)

Tincture of galls put to the solution of tungstate of soda in water does not affect it. On the addition of an acid to this mixture, a brown precipitate forms.

If tungstate of soda is heated to dryness with a drop of muriatic acid, a yellow mass is left. On extracting the saline matter by water, yellow acid of tungsten remains. It is readily soluble in carbonate of soda. If taken wet on the blade of a knife, it soon becomes blue. This is made very evident by wiping the blade of the knife with a bit of white paper. Possibly a small remainder of muriatic or sulphuric acid among it is required for this effect.

9. *Nitric Acid.*—Nitrate of ammonia produces no deflagration when filtering paper, wetted with a solution of it and dried, is burned: the salt volatizing before ignition, most, or all the other nitrates deflagrate.

If metallic copper is put into the solution of a nitrate, sulphuric acid added, and heat applied, the copper dissolves with effervescence.

10. *Carbonic Acid.*—It is to be discovered in the mineral itself. The application of heat is, in some cases, required to render the effervescence sensible. It has been sometimes overlooked in bodies from want of attention to this circumstance.

11. *Silica.*—A simple and sufficient test of it is the formation of a jelly, when its combination with soda is put into an acid.

It has evidently not been intended to enumerate all the means by which the presence of each acid in the soda bead could be perceived or established. Little has been said beyond what appeared required and sufficient.

THE BLACK BALSAM.

The coast of the province of St. Salvador in South America, is called the Balsam Coast, the balsam tree being the exclusive growth of this province, the coast of which extends from Port Acajutla to the Bay of Jiquilisco. Alcedo in his dictionary under the word *Sonsonate* says, "this balsam is the most precious of any known, and highly valued in every part of the world." The tree that produces this inestimable medicine, presents to the pharmacopeia many other valuable drugs. By making an incision in the trunk of it, a liquid exudes, called the black balsam, an admirable remedy for effecting a speedy cure of wounds of every description. From the flowers the spirit of balsam is made: the seeds or nut produce the oil of balsam, an excellent anodyne; and the capsules yield the white balsam. From these simple kinds the tincture, or essence of balsam is extracted; it is generally termed balsamito, and was a discovery of Don Jose Eustaquio, director of the Miut in Guatemala, who published a description of the many virtues of this peculiar medicine. It is cordial, corroborant, and diuretic; and dissolves viscous humours, facilitates the circulation, and aids digestion. Taken in any quantity of half a spoonful, it soon produces recovery from fainting fits. A few drops in aniseed, or quince water, is an excellent remedy for bilious or windy cholic. In aniseed it relieves hysterical affections; in mint water it expels worms; in wormwood water it is excellent in child-birth; in water of onion seed it relieves the stone. To strengthen the stomach, exhilirate the spirits, for colds, or in fevers, it may be taken in wine; and for many other complaints, by adapting the vehicle in which it is taken to the particular infirmity, it is a sovereign medicine. A small quantity infused in common water gives it the appearance of milk, and a pledget dipped therein is a good remedy in most accidents. Placed upon the abdomen it alleviates heats and difficulties of passing the urine: applied to recent wounds it is a good styptic, and will affect a cure: it removes the itching and pain which remains after extracting the nigua,* and prevents inflammation: a cloth dipped in it, and laid upon the face will prevent wrinkles and remove freckles."—At least so says our author.—(*History of Guatemala, in Spanish America, by Don Domingo Juarros, a native—Translated by J. Bailey, Lieut. R. M. London*, 1823, *pp.* 261, 263.)

* An insect, something like a flea, which forms a nidus between the skin and the flesh, particularly about the feet and legs, producing the most disagreeable sensation; unless carefully removed it multiplies incredibly, and renders a cure extremely difficult.

HYDROCYANIC ACID.

Some chemists, as Lampaduc and Brugnatelli, formerly announced that the hydrocyanic acid might be obtained from prussiate of potass; but they did not sufficiently determine the manner in which it might be rendered of uniform strength. M. Gea Pessena, a chemist of Milan, has employed himself in removing this deficiency. The following is his process, which must be economical, if the result corresponds with the account of the inventor. He introduces eighteen parts of prussiate of potass and iron, reduced to a very fine powder, into a small tubulated glass retort, taking care not to soil the neck or side. He adapts to this vessel a very small tubulated balloon, furnished with a conducting tube, which he plunges into the first flash, containing a little distilled water. The rest of the apparatus is contrived so as to avoid absorption. This being done, he pours into the retort a cold mixture of nine parts of concentrated sulphuric acid and twelve parts of water. The tube of the retort is to be hermetically secured; the whole left at rest for twelve hours, at the commencement of which the balloon is to be surrounded with ice; the neck of the retort is to be constantly cooled with wet cloths; afterwards the materials are to be heated with some burning charcoal, and preserved in this state until the streaks, which are observed in the neck of the retort, become more rare, and until a blue vapour arises, which threatens to pass into the receiver. At this point, the heat is immediately discontinued; the apparatus is allowed to cool entirely, and the contents of the receiver are poured into a proper vessel. The hydrocyanic acid obtained by this process has a strong and penetrating

odour; the specific gravity is from 0.898 to 0.900, at the temperature of 13 or 14 of reaumur; it likewise possesses, according to M. Pessena, all the properties of the purest prussic acid.—*(Giornale de Fisica,* 1822.*)*

ABORTION.

Alexander Arthur, Surgeon in Forfar, has been apprehended and committed to Forfar Goal, on a criminal charge, for administering medicines to Susan Davidson, from Brechlin, servant to a gentleman in Forfar, and by this and other means effecting abortion. The evidence is understood to be complete. The woman herself has been precognosced as a witness. It was in consequence of the severe distress under which she was suffering, that the iniquitous business was discovered; she found it necessary to apply to her master, who, in this way, learned what had happened, and immediately gave information.

NATURAL HISTORY.

Some men who are employed in sinking a well for the use of the Barley Mow Public-house, at Alceston, Sussex, after excavating to the depth of about seventy feet below the surface, came to a soil stratum formed of marine productions, such as the shells of oysters, cockles, muscles, &c. &c. the thickness of which has not yet been ascertained, but it must be considerable, as the men have worked several feet into it, and without any appearance of alteration or change. The site of the Barley Mow lies about 5 miles from the sea, and behind three high hills form part of the S. D.

MONSTER.

1552.—"The third of August at Middleton xi miles from Oxford a woman brought forth a child which had two perfit bodies from the nauell vpward, and were so joyned together at the nauel, that when they were laid in length, the one head and body was east, the other west, the legges for both the bodies grew out at the midst, where the bodies joyned, and had but one issue for the excrements; they lived xviii daies and were both women children."—*Stow's Chronicles Abridged ed.* 1598, *p.* 287.

MELANGE.

Dobereiner's Apparatus for making Extracts.

This apparatus serves to extract by means of water, alcohol or ether, the soluble substances from any substance to be analyzed, in quantities from 10 up to 200 grains. It is composed of a tube of glass from 4 to 9 lines in diameter, and from 4 to 9 inches long. The tube is closed below by a cork, to which is adapted a small tube open at both ends. This, except that its upper extremity is covered with a piece of muslin, communicates with the large tube. The substance to be operated upon is put into the large tube about half filling it, and the solvent is then put in over it. A small glass bulb proportionate in size to the quantity of solvent used, is then emptied of air by heating a few drops of alcohol in it, and immediately attached by a tight cork to the lower end of the small tube. The whole apparatus is then set aside in a cool place; as the alcohol vapour condenses, a vacuum is produced, and the pressure of the air in the large tube forces the fluid through the substance to be operated upon into the bulb. In a few minutes the extraction is complete, the bulb is then removed, its contents taken out, the air in it again displaced, and the operation repeated; or, if necessary, the fluid is left in contact with the substance some time before it is made to pass from it into the bulb.—*(Bib. Univ.* xxi. 188.)

Heat from Friction of a Solid and Fluid.

It may be remarked that the rapid rotation of the little mills which complete the attenuation of the liquid mixture for paper before it passes to the tub, produces in it a very sensible heat not at all due to the elevation of the temperature of the wheel itself by the friction of its axis, for it cannot be perceived by touching that part, but attributable to the blow of the fans of the wheel on the mixture, which they strike with much rapidity

and violence. This is the first instance known to us of heat produced by friction of a solid against a liquid. M. Pictet.—*(Bib. Univ.* xxi. 134.)

Inflammation of Powder under Water.

M. Serullas has given the following directions for the preparation of a very fulminating charcoal, by means of which, gunpowder may very readily be inflamed under water.

Carefully powder together 100 parts of tartar emetic, and 3 parts of lamp black, or common charcoal. Prepare some crucibles, capable each of holding about 2 ounces of the mixture, by rubbing them within with powdered charcoal to prevent the adherence of the carbonaceous mass left after calcination. Fill them about three-fourths with the mixture, then put in a stratum of powdered charcoal, and lute on a cover; after 3 hours calcination in a good reverberatory furnace, the crucibles are to be removed, and left for six or seven hours to cool, that the air, which always enters, may have time to burn the surface of the fulminating mass, for otherwise, if withdrawn too soon, explosion always takes place. At the end of that time great care is to be taken in transferring the mass in the crucible as rapidly as possible into a vessel with a large aperture, which can be perfectly closed. In time, the mass divides of itself into fragments and may be preserved for years.

When the calcination has been thus performed, the produce is excessively fulminating; so as, without compression or confinement, to give, on the contact of water, a detonation like that of a powerful musket.

The following mixture will also produce an equally fulminating charcoal; 100 parts of antimony, 75 of cream of tartar, 12 of lamp black, well powdered and mixed together.

The experiment of firing gunpowder under water by means of these substances, was made in the following manner:—half an ounce of gunpowder was put into a strong glass tube, closed at one end: a piece of fulminating charcoal, about the size of a pea, was placed upon it, and immediately the orifice of the tube closed by a prepared cork, which had a small hole through it, closed by fat lute. The tube was then retained by weights at a depth of between two and three feet beneath the water, and then, by means of a steel wire fixed to a long rod, the lute was perforated and water admitted. The powder immediately inflamed, and a weight of above 2lb. was thrown out of the vessel containing the water.—*(Annales de Chim* xxi. 197.)

Organic remains.—The skeleton of a rhineoceros was discovered a short time ago, by some miners in search of lead ore, ninety feet below the surface of the earth, in the neighbourhood of Wirksworth, Derbyshire. The bones are in a perfect state, and the enamel of the teeth uninjured. We believe Mr. Buckland has seen these remains.

Lindley on the effect of climate on Rosa Canina.—It is well known that dogs almost lose their hair in some tropical countries, while in the colder regions of the north, the usual hair is thickened at the roots by a close shag or wool. A similar fact is observed in the common Dog Rose *(Rosa Canina)* the setæ or bristles of which, are in some northern countries abundant, while in Egypt and Madeira they wholly disappear.

Perspiration of the Feet.—When the perspiration of the feet is checked, and unpleasant symptoms are thereby produced, the natives of Finland are in the habit of restoring it by means of the exterior white bark of the beech *(betula alba)*. It is worn in the form of soles to the shoes, the inner surface of the bark being turned to the planta pedis.—*(Petersburger Vermischte Abhandlungen.)*

Preservatson of Echini, Asteriæ, Crabs, &c.—It is a great object to preserve specimens of these species of animals in a natural history collection, so that they shall not fall to pieces. Colonel Mathieu, who has made a fine collection from the Isle of France, endeavoured to find some means of so drying the mucilaginous or membranous part, which serves as an articulation between the joints, as to prevent that separation which so frequently takes place; and he found the best to be the application of dilute lime-water, before drying. Echini were first emptied, and then the animal put into lime-water for twelve hours, taken out and dried in the shade, and put in the same water for two hours, and then dried, the spines being preserved in their place by cotton.

Asteriæ were put alive into lime-water, and treated as the echini. Such as were fleshy had the flesh first removed. There are some so delicate as not to be able to bear immersion until dead; when alive, even fresh water will cause them to separate into many pieces.

With the crustaceous animals, as the crab, the head is first removed and dried in the shade, then the body and limbs emptied as much as possible. The specimen is then placed in lime-water five or six hours, and dried in the shade thrice successively. —When dry, and having but little odour, the head is replaced, and the whole preserved in the shade. The colours are very little injured by the operation.—*(Jour. de Phy.)*

On the Flowers of the Meadow Saffron, by Mr. Frost.—This last autumn, I made several preparations of the meadow saffron flower (viz. a vinegar tincture and wine), which have subsequently been administered by several able physicians with whom I am acquainted; and they have informed me that the preparations of the flowers operate more uniformly and certainly than those of the bulb and seeds. It has long been a matter of great doubt as to what the basis of the celebrated *Eau Medicale* really is, but it is now pretty certain that a tincture of the flowers of *colchicum autumnale* constitutes that noted nostrum.

Mr. Nuttal on the Impregnation of Plants.—This author infers, with some ingenuity, from the experiments of Spallanzani and the reasoning of Decandolle, that vegetable impregnation may probably arise from odoriferous vapour, exhaled either from the stamens or the petals which Decandolle is disposed to consider as of the nature of stamens.

PROCEEDINGS OF PHILOSOPHICAL SOCIETIES.

Royal Society.

(Continued from page 224.)

He proceeds to show, that the consciousness of the action of the recti muscles, gives us the conception of the place or relation of objects. He then proves by observation and experiment, that the actions of the straight muscles are inseparably connected with the activity of the retina; that is, with the enjoyment of the sense of vision: but that the moment the vision is unexercised, the eyeball is given up to the operation of the oblique muscles, and the pupil is consequently drawn up under the eyelid. Hence, the eyes are elevated in sleep, in faintness, and on the approach of death; and that distortion which we compassionate as the expression of agony, is the consequence merely of approaching insensibility.

Having examined the different motions of the eye and eyelids, and the muscles which are appropriated to them, the author promises, in the second part of the paper, to explain on this foundation, the distinction in the uses of the nerves of the orbit.

April 10.—The following paper was read—an account of an apparatus on a peculiar construction, for the exhibition of electromagnetic experiments. By W. H. Pepys, Esq. FRS.

This apparatus, constructed at the London Institution, under the direction of the author, consists of two plates, the one of copper, and the other of zinc, each two feet wide, and 50 feet long, giving a total surface of 200 feet square. These plates

are wrapped or coiled round a common centre, and are prevented from contact with each other by the interposition of three cords of hair lime, and also of notched slips of wood placed at intervals. Two conductors of copper wire, nearly three-fourths of an inch in diameter, are attached, one to the zinc, and the other to the copper plate. In order that so large a mass may be readily employed for experiment, the apparatus is suspended by means of pulleys and a counterpoise, and so let down into a tub of acid, or, when not in use, into one of water. It requires 55 gallons of fluid.

This instrument exhibits very powerful magnetic effects; when the contact was made, a change in the direction of compass needles was produced, at the distance of five feet; steel bars enclosed in cylinders of glass, with a spiral of wire round them, were rendered magnetic, and several were suspended together; when the contact was broken, the bars fell, but one of them was immediately taken up again on restoring the contact, though it weighed above 270 grains. The electric intensity of the apparatus is very slight; it has not any decomposing action, and will not make a spark with charcoal, nor will it deflagrate the metals.

(To be continued.)

New University in Virginia.

An university has just been established for the state of Virginia, by the venerable ex-president Jefferson, now approaching his 80th year, at Charlotte Ville, near Monticellis, the place of his residence. He has expressed a hope, by selecting professors from both hemispheres, to make this one of the best establishments of the kind in his country. There are at first to be ten professors, and apartments for 208 students.

Scientific Books preparing for publication.

Mr. Goldsworthy Gurney is about to publish a Series of Lectures on the Elements of Chemical Science, lately delivered at the Surrey Institution.

Mr. Olivier has in the press, Popular Obesrvations on Muscular Contraction, &c. &c.

In the press, a translation of the 2nd vol. of Magendie's Physiology.

Dr. Automarchi is publishing an anatomical work (80 plates) representing the whole structure of the human body, except the integuments, &c.

In the press, a translation of de Humboldt's Geognostical Essay on the Superposition of Rocks.

MARRIED.

May 13, at St. Mary-le-bone New Church, D. Macnamara, Esq. Surgeon, R. N. to Frances, eldest daughter of G. Fennell, Esq. the Accountant of the Treasury of the Navy.

OBITUARY.

On Friday, the 2nd instant, at his house in Red Lion Square, Dr. Haworth.

On his passage to this country, in the *Lord Castlereagh*, Charles Daw, Esq. Surgeon in the Hon. East India Company's Service at the Bombay Presidency.

On 15th Nov. last, in Saugur Road, F. W. Hunter, Esq. Surgeon of the Hon. East India Company's ship Asia.

At Bushire, in Persia, Nov. 17, where he had gone for a change of air, Mr. Robert Green, Assistant Surgeon in the Hon. East Iudia Company's service.

On the 12th instant, on board the Hon. East India Company's ship the *Marquis of Wellesley*, John Woolcot, Esq. a Surgeon in the Company's Service: he died on the eve of his passage out to resume his official duties in India.

TO CORRESPONDENTS.

R. G. is received, and its contents are undergoing the process of analysation, &c. for some succeeding number.

The article signed "AN ARMY SURGEON," came very appropriately, and will be used conformable to the instructions that accompanied it.

We shall be glad to hear from our old friend A. B. as early as possible.

D. D. P. and Tyro are returnable, with our best thanks for their kind intention:

"MUM from Piccadilly" is postponed for a week or two longer.

Communications, advertisements, &c. &c. addressed for the Editors, at the Publishers, &c:

London:

Printed by E. JUSTINS, 41, *Brick Lane, Spitalfields.*

Published by COX and SON, St. Thomas's Street, and 39, High Street, Southwark. Sold also by Sherwood, Neely, and Jones, Paternoster Row; Simpkin and Marshall, Stationers' Court; Callow and Wilson, Princes' Street, Soho; John Cox, Berner's Street, Oxford Street; E. Willson, Corner of Royal Exchange; Chappel, Cornhill; W. Turner, Cheapside; T. Boys, Ludgate Hill; H. and W. Smith, 192, Strand; G. Roake, 31, Strand; W. Sams, St. James' Street; W. Stewart, South Bridge Street, Edinburgh; Hodges and M'Arthur, Dublin; &c. &c.

THE WEEKLY

MEDICO-CHIRURGICAL & PHILOSOPHICAL MAGAZINE.

No. XVI.] SATURDAY, MAY 24, 1823. [*Price* 4*d.*

" FLORIFERIS, UT APES, IN SALTIBUS OMNIA LIBANT
OMNIA NOS, ITIDEM, DEPASCIMUR AUREA DICTA."

DR. GALL'S LECTURES

on the

PHYSIOLOGY OF THE BRAIN,

&c. &c.

We announced, in our last Number but one, the intention of Dr. Gall to give a course of lectures on the physiology of the brain before he leaves the British metropolis; this course commenced on Friday, the 16th instant; and, if we are correctly informed, we may venture to state that this will not be the only one he purposes to deliver before he returns to Paris. Although the shortness of the notice previous to the commencement has not exactly filled up the class so numerously as might have been anticipated, on this highly interesting occasion, still, the celebrated professor is nightly surrounded by amateurs, increasing in number, who seem, not only to imbibe the developement of his extraordinary doctrine with more than common enthusiasm, but with that rational gratification, at the same time, which has established its fame among the enlightened and unprejudiced, who are capable of judging for themselves, of every country, where the same opportunities have already been afforded of appreciating its value, and of submitting its merits to general consideration, as a science worthy of cultivation, having nothing less for its results than a perfect knowledge of human nature.

The possibility of the doctrine in question, founded on the moral and intellectual functions of the brain, supposes—

1st. That the moral qualities and intellectual faculties are innate.

2. That the exercise or manifestation of them depends upon organisation.

3. That the brain is the organ of every propensity, good or bad—of every sentiment—and of all the faculties.

4. That the brain is composed of as many particular organs as there are propensities, sentiments, and faculties, differing essentially among themselves.

And, as the organs and their seats could only be discovered by observation, it was still necessary, compatible with this system, that the shape of the head or cranium should represent, in the greater number of cases, the shape of the brain, and suggest various means to discover the fundamental qualities and faculties, and the seat of their organs.

The demonstration of these principles are followed, in the course of the lectures, by the exposition of the moral qualities and intellectual faculties, the history of their discovery, their natural history, of the seat of their organs in the brain, and the shape these organs cause the head to assume, &c. &c.

For the actual purpose of demonstration Dr. Gall has brought with him a rich selection of upwards of 300 sculls of different descriptions of men and animals, in which the various organs are largely developed—in addition to these are some admirable casts of the brain in wax-work; and upwards of 100 well-executed plates of the different configurations of the cranium, &c.; containing portraits

of men of all countries who have distinguished themselves for some particular talent, or peculiar propensity.

Before we proceed to take a view of Dr. Gall's work, "ON THE FUNCTIONS OF THE BRAIN," &c. we shall, according to our promise, lay before our readers the substance of his introductory lecture, devoting as much space weekly as we can possibly spare, consistently with our limits, to those which follow.

"Upon every new discovery," observed Dr. G. "and particularly upon every new doctrine, it is customary to ask—from what circumstances did the author conceive the first idea of it? Although the same experiments do not lead different individuals to the same meditations; nevertheless, when these identical experiments are connected and presented in order, they originate ideas in the mind of the reader analogous with those of the author, and frequently the discovery appears so natural to him that he is disposed to cry out, 'how comes it that I did not find it out long ago.' Dr. G. in order to point out the manner in which he derived his knowledge, remarked, that early observation, and enquiry after truth, were subjects to which he was passionately and innately attached. He observed, that he was one of ten children with whom he was brought up, in the midst of a great number of comrades and school-fellows, all of whom possessed something particular, a talent, a propensity, or a faculty that distinguished him from the rest. This diversity determined their indifference, their affections and reciprocal aversions, as well as their disdain, emulation, and *liaisons*. In infancy, he observed, we are rarely subject to be deceived by prejudice; things are then taken as they really exist. "We soon judged," said he, "who among us was virtuous or prone to vice, modest or proud, candid or two-faced, peaceable or quarrelsome, good or wicked, &c. Some were distinguished for the beauty of their writing, others for the facility with which they made calculations, others for their aptitude in learning history, geography, or the languages. One excelled in composition by the elegance of his periods; another had always a dry and stiff style; another compressed his arguments and clothed them in strong expressions. A number evinced a talent or a propensity for things that were by no means the aim of our education. They carved and could draw very well; some devoted their leisure to the cultivation of a little garden, whilst their companions gave themselves up to noisy games; others delighted in running about the forests, in hunting, looking for bird's nests, and in collecting flowers, insects, shells, &c. In this manner each of us displayed our proper character, and I never observed that he who one year had been a disloyal and deceitful companion, ever became the year after a sure and faithful friend. The school-fellows from whom I had most to apprehend were those who learned so easily by heart that, when we were examined, they often, on this account, deprived me of the place I had obtained in the class by my compositions. Some years afterwards, I changed my residence, and I had the misfortune again to meet with individuals gifted with as great a facility of learning by heart as those I had left. It was then that I remarked that they all resembled my old rivals by large salient eyes.

Two years later, I went to an university; and my first attention was fixed on those of my school-fellows who had large, prominent eyes, even with the head. Their excellent memory was generally boasted of, and, although in many respects, they were not among the first in this respect, they all, nevertheless, were superior to me, whenever it was necessary to learn quickly by heart, and to recite long passages with exactitude. This

same observation having been confirmed among the students of the other classes, I naturally expected to find a great facility of learning by heart among all those in whom I should observe large prominent eyes. I could not believe that the union of two circumstances which had struck my attention on these different occasions was only the effect of chance. After having further assured myself on this subject, I began to suspect that there ought to exist a connexion between this conformation of the eyes and the facility of learning by heart. Passing on from reflexion to reflexion, and from observation to observation, I imagined that if the memory could be recognised from external signs, it might be the same with the other talents or intellectual faculties. From that time every individual distinguished for any quality or faculty whatever, became the object of my attention, and of a detailed study of the shape of their head. By degrees I thought I could flatter myself with having found other external characters constantly met with in the heads of great painters, great musicians, and great mechanics, and which consequently denoted a decided disposition for painting, music, the mechanical arts, &c.

In the interval, I had begun the study of medicine. Much was spoken to us relative to the functions of the muscles, viscera, &c. but nothing was said of the functions of the brain and its different parts. I recollected my first observations, and I at first suspected what it was not long before I brought to a certainty, viz. that the difference in the shape of the head is occasioned by the different form of the brain. It never entered my mind that the cause of the moral qualities, or of the intellectual faculties was to be found in such or such a place in the bones of the cranium. Was it not then very natural to hope, that, by discovering and proving, in men gifted with inclinations or distinguished talents, external signs of their qualities, this discovery should lead me to know the functions of the brain and its parts? The hope of one day being enabled to determine the relation of the moral and intellectual strength with organism, the hope of founding a physiology of the brain, was encouragement too powerful for me to resist the resolution I had formed of continuing my researches until I had attained my object, or until I had thoroughly convinced myself of the impossibility of doing so.

This noble enterprise had not been very difficult if, entirely free, I had been given up to myself and nature alone. But it too often happens, that, the more learned a man becomes, the more he is apt to wander from simple truth: this was my lot. My conviction still too feeble was shaken in proportion as I acquired knowledge, or rather as I heaped up errors and prejudices.

The philosophers assert, said I to myself, that all our faculties proceed from external sensations, or at least that all men are born with equal faculties, and that the differences remarked among them are due, either to education, or accidental circumstances. If this be the case, there can be no external signs of any faculty; and consequently the project of learning to know, in this manner, the functions of the brain and its parts, is a real folly. But I always returned to my first observations. I knew that my brothers and sisters, companions and school-fellows had nearly received the same education, or rather, generally speaking, they had received none. All had grown up in the midst of rhe same circumstances and the same analogous impressions. I moreover saw, that for the most part those whose education had been carefully attended to, and on whom the masters had particularly lavished their instruction, were far more backward than others in point of capacity. We were fre-

quently accused of a want of zeal or inclination; but several among us were not able, notwithstanding the best will and the most obstinate efforts on our part to get over certain points as far as mediocrity; whilst, in other parts, they surpassed their school-fellows without any effort, and, to use the expression, without being conscious of it. In fact, our masters did not add much faith to the system of the equality of faculties; for they imagined they were able to exact more from one scholar than from another. They frequently spoke to us about natural gifts, gifts of God, and they exhorted us in the words of the Evangelist, by telling us that each would have an account to render in proportion to the talents he had received.

I had also observed, both in tame and wild animals, a considerable number of which I had always around me, differences of faculties and manners the same as in men. One dog for instance, was almost of himself skilful in the chace, whilst another, of the same race and same litter, could only be trained with considerable difficulty; one was wranglesome and quarrelled with every dog it met with, whilst another was quiet and peaceable; the latter could not find his way back a short distance from home; the former, on the contrary, although very young, returned, after having been lost from distant parts. One bird listened with great attention to the tune that was played before it, and learnt it with admirable facility; another of the same brood, fed and taken care of in the same manner, had its head always wandering, and never learnt any thing except its natural song. One pigeon was faithful to its partner; and, notwithstanding reiterated attempts, it would never consent to couple with another female; another pigeon, on the contrary, stole into all the dovecots to violate and carry off strange females, &c.

In all these cases, neither bad will, education, nor different impressions upon the external senses could be alleged. I was consequently led to conclude that the inclinations and faculties of men and animals were innate, that is, were born with them.

But then the following question presents itself: This inneity, what is it founded upon? does it belong to a particular principle, to a spiritual principle, to the soul; and that soul, does it exercise its faculties freely and independently of organization; or in the exercise of its faculties, is it subordinate to certain material conditions? or, lastly, are those faculties the result of organism itself?

If this principle or soul enjoys the exercise of its faculties, independently of organization, it is, as well as all its functions, beyond the sphere of the physiologist; the metaphysician and the theologist alone will arrogate to themselves the power of pronouncing upon the nature of it. But I beg leave to submit the following questions to those who pretend that this principle is independent of organization, viz. is this principle any difference of it either in the masculine or feminine gender? does it change its nature in infancy, in adolescence, in puberty, in manhood, in old age, or in decrepitude? does it undergo any modification according to the quality and quantity of the aliments with which the body is nourished? or according as digestion is easy or laborious? what becomes of this independence during sleep, intoxication, apoplexy, acute fevers, stagnations, excrescences, inflammation and ulcers of the brain and its membranes, and in derangements of the liver and stomach. Every one knows that similar circumstances interrupt, suppress, exalt and alter in a thousand ways the functions of the soul. Ought not then these facts lead us to the following consequence, viz. that the exercise of our propensities and faculties, whatever may otherwise be the principle adopted, is submitted to

the influence of organic conditions. Who thenceforward will dispute that the inclinations and faculties do not belong to the dominion of the physiologist? it belongs to him to examine these material conditions, these organs of the soul; it is his province to determine whether their greater or less degree of perfection carries with it a more or less energetic manifestation of their functions; it belongs to him to investigate how far and under what conditions the most favorable developement of the cerebral organs impresses visible or palpable signs upon the external surface of the head; lastly, it is the task of the observing physiologist to find out what are the parts of the brain affected by a determined inclination, sentiment, or talent.

For a length of time I continued my researches, in the manner I had commenced them, actuated solely by my propensity for observation and reflexion. Giving myself up to chance, I collected, during several years, every thing that came in my way. It was only after having accumulated a sufficient mass of analogous facts, that I felt myself in a condition to arrange them in order: I successively perceived the results of them, and it was impossible for me to precede observations, and to multiply them at pleasure.

But, once more, the more I imagined that I had advanced, the more every thing appeared to conspire against me. In one place a phenomenon supposed a thing entirely contrary to physiological dogma; in another, some consequence presented itself which by no means squared with the received opinions of philosophers: and what was not imagined relative to the fatal influence that my investigations were to produce upon morality and religion!

During this continual rencontre of facts with received ideas, what was to be done? was the voice of simple nature to be listened to, or the arrogant opinions of the prevailing doctrines? Was I sufficiently prepared to interpret the just language of nature? I had deceived myself so frequently, who could answer for it, that I should not deceive myself again? Was it not a ridiculous pretension for a young man to hope that his efforts should reveal things to him which, during so many ages had remained hidden from the greatest observers? On the other hand, suppose that my labours were not totally vain, was it not a rash and imprudent enterprise, to bounce against creeds in the dominion of so many different sciences, to contradict anatomists, philosophers, metaphysicians, lawyers, &c.

How often have I not scrutinized my conscience to know whether perhaps some vicious propensity, concealed from myself, did not direct me in my researches? But as I could not foresee how far they would lead me, reputation whatever it might be in perspective, could not open itself to my view, and, independent of this, was it a good method of attaining it by daring to announce extraordinary propositions, divested of probability, and, in a short time, contradicted?

The love of truth, and the conviction of the purity of my views were alone able to inspire me at each step with the necessary confidence and boldness. When a series of irrefutable facts are discovered by experiment, all the doubts and objections are courageously sought after. Every doubt that is resolved is a difficulty removed; every objection that is refuted is an error overturned. In this manner I soon succeeded to obviate more and more the obstacles I met with, and to pursue my road in tranquillity. I soon, in particular, familiarized myself with the following considerations, which are necessarily and profoundly engraved on the mind of every observer and of every reader.

The more new views are great, the closer does the new doctrine touch

the affections and interests of men—the more care also ought the author to take to avoid every sort of arbitrary and rash assertion: but the moment he announces truths, he should be certain *beforehand* that he can only be productive of good. When these truths concern the nature of men or brutes; when they reveal the physical or moral principles of living beings, he will always be able to appeal to the order and harmony which reign throughout the universe. Is it not then the same Creator who made the physical and the moral world? can physical truths be in opposition to moral truths? If certain men bawl out against the danger with which a real discovery threatens any established doctrine whatever, they render that doctrine singularly suspicious; for, either it is false, or the weakness and ignorance of the pretended interpreters of the works of God must be accused.

Nothing can resist the force of truth, and whether public writers, or even governments, attach pernicious consequences to it, who is it that does the mischief? On the other hand, is it not at once impious and absurd to maintain that laws and constitutions ought to be founded on imposture in order to insure the happiness and peace of mankind?

Let us respect truth, you will tell me; but how are we to know that your doctrine on the functions of the brain is truth? truth has its physiognomy as well as falsehood. This doctrine owes its origin to incontestible facts; these facts have revealed the general laws in virtue of which they have their existence; they have conducted to principles which prove themselves independently of the facts from which they have been deduced; every new fact, whether furnished by chance, or elicited by a mind avaricious of experiment, becomes a new confirmation of it; this doctrine has introduced perspicacity, assurance, harmony, and stability, where until now there only existed obscurity, wavering, contradiction, and versatility; it explains the moral phenomena and their modifications, in different ages, in both sexes, in the different states of health and disease, in the different nations; among men and animals it unfolds to us the secret of the diversity of instincts, propensities and faculties, as well of species as of individuals; from the polypus to man it demonstrates, fragment by fragment, the material causes of the gradual advances to perfection of their intelligence, which, in the inverse ratio, by descending from man to the polypus, and by retrenching piece by piece, it effects the diminution and degradation; the numerous propositions of this doctrine, although destroying the most accredited errors from right to left, mutually support and consolidate each other; it is eminently fertile in its application to human affairs, to education, to the arts and sciences, to the study of history, medicine, philosophy, morality, criminal legislation, &c.; it opens to the observing naturalist an immense field for meditation. If these are characteristics of the truth and utility of a doctrine, I am certain the world will be more astonished with the utility of the physiology of the brain, when they have submitted it to more rigorous and more multiplied tests.

Penetrated with these ideas, and confident from the purest motives, I directed my whole attention to find out means which, in the least possible time, would place me in a condition to accumulate the greatest number of facts. I shall speak of these means when I come to treat of the inclinations and faculties, and of their organs in particular. The following is another which presented itself to my mind when I was least thinking about it, and which greatly contributed to bring my works to perfection.

On New Year's day (1805), my father, who lived at Tiefenbrunn,

in the Grand Duchy of Baden, wrote me in the following words: "it is late, and night may not be far off: shall I see thee again?"* there was but another similar invitation, added to the ardent desire that I had cherished in my bosom for a length of time of seeing my dear parents once more, after an absence of twenty-five years, which alone could determine me to abandon my friends and patients for some months. I wished by this circumstance to avail myself of making known to the inhabitants of the North of Germany, my discoveries. In order that my intercourse with them might not be limited to propositions and discussions without support, I took part of my collection with me. I was always of opinion that, without these visible and palpable proofs, it would be for ever impossible to militate victoriously against so many prejudices, prepossessions, and contrary opinions, that I was necessarily to encounter.

I every where met with the most flattering reception; sovereigns, ministers, philosophers, administrators, artists, &c. on every occasion seconded my design, by adding to my collection, and by supplying me with new observations. Circumstances were too favourable for me to resist the invitations that were sent me from the greater number of the universities. On this account my journey was prolonged far beyond the term I had first fixed upon; but there likewise resulted so many private and public discussions on my doctrine, that it reached a degree of maturity that few founders of new doctrines ever attained during their life.

This journey afforded me the facility of studying the organisation of a great number of men of eminent talents, as well as those who were extremely limited, that I might perceive better, by this comparison, the difference between the one and the other. I collected numerous facts in the schools and other establishments of education, in the orphan and foundling asylums, in mad houses, in houses of correction and in prisons, during judiciary interrogatories, and even at the place of execution; multiplied enquiries on suicides, simpletons, and madmen, contributed powerfully to rectify and to fix my opinions. I levied contributions on a number of anatomical and physiological cabinets. Antique busts and statues were submitted to my experiments, and I compared them with the historical accounts.

(To be continued.)

* "Il est tard, et la nuit pourrait n'etre pas loin: te verrai-je encore?" Es ist abead, und kounte bald nacht werden: werde ich dich noch sehen?

It is impossible not to see the beauty and force of this sentence—in allusion to the circumstance a more chaste and sublime metaphor never was uttered—and, for a letter, in point of elegance, simplicity, brevity, and force of expression, it stands unexcelled, particularly from a parent to a child, in ancient or modern history.—EDITOR.

ON THE FUNCTIONS OF THE BRAIN,

And those of its parts, with Observations on the possibility of recognising the instincts, propensities, talents, or the moral and intellectual dispositions of men and animals, by the configuration of their brain and head. By F. I. GALL, 6 vols. 8vo.

This interesting production is probably the most extraordinary that has hitherto appeared in any language: and although without the plates contained in the author's other works, reference is made to them wherever they are alluded to. Each volume contains from 400 to 500 pages.

For upwards of twenty years Europe has been acquainted with the researches of Dr. Gall, relative to the structure and functions of the brain, an object, without dispute, the most important of physiology, and yet up to that time almost entirely neglected. The journals of all nations, more or less imperfectly, have announced the discoveries of Dr. G. Several authors who attended his lectures published

them afterwards, but they often added their own ideas to those of the master. These writings, and especially the new anatomical, physiological, and philosophical propositions of this illustrious observer, gave rise to considerable controversies; during which Dr. Gall remained a silent spectator; and, instead of yielding prematurely to the impatient curiosity of the public, he continued to occupy himself, with indefatigable perseverance, to multiply his observations and to consolidate the principles which constitute the basis of his doctrine on the laws of the nervous system, particularly on the functions of the brain and its parts.

After having exhausted all the means in his power, he at last published, at an enormous expense, his great work in folio, and in quarto, in 4 vols. with an atlas, containing one hundred folio plates. This magnificent work soon found its way into the principal libraries of Europe, and it contributed powerfully to destroy the prejudices which still existed relative to the nature and tendency of Doctor Gall's works.

It was regretted that the price of the work was so high. The author was invited from all parts to publish an edition, which, in respect to price, might be more within the reach of those to whom it was of the greatest utility. It was to these solicitations that Dr. G. sent his octavo work to press; to be comprised in six volumes devoted to the physiology of the brain;* wherein anatomy is only treated inasmuch as it is indispensable for the intelligence of physiology. This is not merely a work on medicine, natural history, of morality or philosophy: all classes of society may deduce new views from it, and knowledge of the utmost interest. One thing in particular that distinguishes the works of Dr. Gall from those of other philosophers who have gone before him, and who have written on human intelligence is, that he (Dr. G.) set out in his researches, from a more distant point: he examines the faculties and the degree of intelligence of different species of animals; and, like an exercised observer running over the whole scale of beings, he has gradually gone back to man himself. By this means, he was able to determine on the nature of instinct, reason, will, free agency, &c. he has established how different inclinations and talents originate; he has distinguished the moral qualities from the intellectual faculties; he has estimated the motives of our actions, sounded the origin of the sciences, of the arts of different states, determined the point of perfection of the human species; and he has proved that it can lose none of its ancient qualities or faculties whatever, nor can it acquire new ones. It is by this work we are able to know the ratio of the developement of different geniuses, independent of all education, and even in spite of an education of a contrary nature.—Thence views, no less important than new relative to education, may be obtained; thence, for the legislator, the magistrate and the lawyer a fertile source of reflexions relative to the exercise of moral liberty, as in suicide, infanticide, &c. and the degree of responsibility attached to the guilty, according to the strength, weakness, or state of alteration of the organs on which their moral and intellectual faculties depend; consequently, more just notions on the nature of crimes and the degree of punishment that ought to be awarded to them; thence, for the moralist, clear and more positive ideas of virtue, of vice, of true morality, &c. Above all, physicians

* The fifth volume of this work is now in the press; but such is the demand for those brought over with the author, that it is a question now whether a copy can be procured. We apprehend, at least, they are very scarce.

will find in this work a road opened for fresh investigations on mental affections, and they will learn to refer to the physical alterations of the brain, or of its different parts, the different phenomena presented to them in somnabulism, delirium, mania, melancholy, folly, imbecility, &c. Philosophers in general will find a number of questions treated of, of the utmost importance: for example,—are our inclinations and our faculties innate? does the manifestation of them depend on material conditions? what idea ought we to form of fatalism and materialism? how far were the opinions of ancient and modern philosophers founded relative to the origin and nature of the faculties of the soul? &c. At the end of these discussions, the author, after having established what the fundamental faculties of men and animals are, proves that their respective seats are in the brain, and each in one of its different parts proper to it. By this means, having recognised that the more a part is developed, the better it exercises its functions, he has demonstrated that the brain exercises such an influence over the form of the cranium that, in the healthy state, the latter is always arranged according to the form of the other. By these means the author has enabled us to recognize the developements of the different parts of the brain, by the shape they have given to the cranium, and consequently to judge by the inspection of this cranium, of the most decided faculties of the individual. In this manner the author discovers to us by the most ingenious means, the seat of the organ of physical love or of the instinct of propagation; the organ of the love of progeniture; of the attachment or source of friendship; of the instinct to defend oneself and property; of the carniverous instinct or the propensity to destroy; the organ of cunning; the organ of the sentiment of propriety, or the instinct of covetousness, or the propensity to steal; the organ of pride, love, and authority; of vanity, ambition, and the love of glory; the organ of circumspection, foresight, &c. Lastly, the author traces the point of demarcation between the organs common to certain animals and the organs of the intellectual faculties and moral qualities which characterize the human species. It is there that are explained the organ of comparative sagacity; the organ of the metaphysical spirit; the organ de l'esprit caustique, of the spirit of wit; the organ of poetic talent; the organ whence goodness, benevolence, mildness, &c. are derived, moral sense, conscience, the talent of imitation, of the actor, expression in the arts, &c. The organization that disposes to vision, and which inclines men to religious sentiments, and the belief in God, &c.

The particular account of each organ is composed of the historical discovery of the organ, of the natural history of the quality or of the faculty resulting from it, of the indication of the seat, and form of that organ, and besides from observations on the respective sphere of activity of the different organs, either in a state of health, disease, or mental alienation. The author also gives the most satisfactory explanation of all kinds of folly, general as well as partial; and here as throughout the remainder of the work, things speak in such a manner for themselves, that every person possessing an ordinary share of judgment is not less capable than the most learned of following the author in the tract pointed out to him by nature, and of deciding of the justness of the consequences which he so rigorously deduces from facts.

Every nation has its peculiar moral and intellectual character. The author proves that this character accords with the predominating form of the head of that nation. In short he fixes in an invariable manner the pathognomonick laws, as well as those of memory and pantomime, as being the expression of the action of the

different parts of the brain itself. —This is a brief though imperfect sketch of the multiplicity of objects treated of in this extraordinary work, a work that requires no eulogium from us; the well known reputation of the author dispenses us from offering any: it is sufficient to announce, that it is in this book that Dr. Gall himself consigns his doctrine to the judgment of the public and of posterity. This edition has moreover acquired a high degree of interest from the new observations with which the author has enriched it, as well as by the refutation of the recent objections which have hitherto been made against it.

DOCTOR PARIS ON ANTIDOTES.

(*Pharmacologia, 5th Edition.*)

(Continued from page 229.)

It had been long admitted that a poison may produce death by acting on the extremities of the nerves of the stomach and intestines, without being absorbed; but to the experimental labours of Mr. Brodie we are indebted for our present correct views upon the subject. It was observed by Bichat, (and the observation has been confirmed by Brodie,) that the influence of the brain is not directly necessary to the action of the heart; for that when the functions of the brain are destroyed,—even when the head is removed,—the heart continues to contract for some time afterwards, and then ceases only in consequence of the suspension of respiration, which is under the direct influence of the brain. Assuming this as a principle, it will easily appear that certain poisons may, by infecting the brain paralyse the muscles of respiration, and occasion death by suffocation. Mr. Brodie accordingly found that, by the administration of a large dose of alcohol to a rabbit, the pupil of its eyes became dilated, extremities convulsed, and the respiration laborious; and that this latter function was gradually performed at longer and longer intervals, and that it at length entirely ceased. Two minutes after the apparent death of the animal, he opened the thorax, and found the heart acting with moderate force and frequency, *circulating dark-coloured blood*. He then introduced a tube into the trachea, and produced artificial respiration by inflating the lungs; and found that, by these means the action of the heart might be kept up to the natural standard, as in an animal from whom the head is removed. The same phenomena resulted from the injection of two drops of the essential oil of bitter almonds, diffused in half an ounce of water, into the rectum of a cat; and from the application of the empyreumatic oil of tobacco to the tongue and rectum of cats and dogs. Now, it is obvious that the functions of the brain are immediately disordered by the influence of these poisons on the tongue, stomach, and lower bowels of animals, so instantaneously, that it is impossible that absorption should have already taken place. The poisons above enumerated appear to affect the brain only, and through it the organs of respiration, leaving the powers of the circulation unimpaired: there are, on the contrary, certain substances which act on the heart at once; such as the infusion of tobacco, which suspends its action even before the animal ceases to respire, and kills by producing syncope. The same effects are occasioned by the two species of upas from Java, called *upas antiar* and *upas ticuté*. In these cases, it is probable that the spinal marrow is primarily affected, which recent experiments have shown to have an intimate relation with the action of the heart. We next come to speak of those poisons which enter the circulation, and act through that medium on the heart, brain, and alimentary canal. These organs, however affected in very different degrees by different poisons. Mr. Brodie has shown that vegetable poisons, although when introduced into the alimentary canal affect life, in consequence of the nervous sympathy

which subsists between these surface and the common sensorium, yet, that the same poisons applied externally to a wound produce their effects exclusively through the medium of the circulation, being conveyed to the brain only by mixing with the blood in the vessels, and not by being conveyed through the absorbents; for a ligature upon the great vessels prevents them from producing their deleterious effects: whereas a ligature upon the thoracic duct, or general canal, through which all the absorbents pour their contents into the blood, does not in the least retard or prevent the operation of the poison. There are also several of the mineral poisons, which, whether introduced into the stomach or applied externally to a wound, poison the animal in consequence of being carried into the circulation. It had long been supposed that arsenic occasioned death by inflaming the stomach; but Mr. Brodie has clearly demonstrated that its influence arises from its being absorbed, and that it must be regarded as a vital rather than as a chemical agent. In the first place, he has found the inflammation of the stomach in several cases so slight, that on a superficial examination, it might have been easily overlooked; and in most of his experiments with arsenic, death took place in too short a time to be considered as the result of inflammation; and, in the next place, in whatever manner the poison is applied, whether externally to a wound, or internally to the membrane of the stomach, the inflammation is confined to the stomach and intestines: and, indeed, it is commonly more violent, and even more immediate, when applied to a wound than when internally administered; and it also precedes any inflammation of the wound. This important fact was proved by an experiment made by Mr. Hunter and Sir Everard Home, and subsequently by the repeated investigations of Mr. Brodie. It deserves notice, however, that, although the affection of the stomach and intestines from this poison is not, under ordinary circumstances, the cause of death, it may be so in some instances, where the animal survives the effects produced on the organs which are more immediately subservient to life. Mr. Henry Earle communicated to Mr. Brodie an interesting case of this description, of a woman in St. Bartholomew's Hospital, who had recovered from the immediate symptoms occasioned by the ingestion of arsenic, but died at the end of four or five days; when, upon dissection, there appeared extensive ulcerations of the stomach and bowels.

(To be continued.)

TIEDEMANN ON THE FŒTAL BRAIN.

(Concluded from page 226.)

He agrees with Reill in describing the *fornix* as being formed from above, downwards; its columns are composed of fibres arising from the *thalami optici* and descending to the *corpora mamillaria;* like the *corpus callosum*, it extends horizontally backwards in proportion as the mass of the hemispheres is more developed.

From the direction of the fibres of the *septum lucidum*, he concludes that they arise from the anterior pillars of the fornix, and asserts that the cavity between its layers presents, in the fœtus a small triangular aperture situated between the anterior columns of the *fornix* and the *anterior commissure*. This opening forms a communication with the third ventricle, admits the entrance of the *pia mater*, and is sometimes found open in the adult.

Gall classes the *anterior commissure* in his imaginary system of converging fibres. Tiedemann proves, that it arises from the fibres of the crura cerebri after their passage through the *corpora striata;* some of these fibres then pass forwards, bend inwards, and are there united with those of the opposite side; so

that this commissure, which begins to appear about the third month, unites the radiations of the *crura cerebri*, the *corpora striata*, and the anterior lobes of both sides.

The *pineal gland* and its peduncles, Professor Tiedemann considers as forming a commissure of the *thalami optici*, with the addition of a mass of grey substance.

He coincides in the opinion, that the anterior of the *tubercula bigemina* on each side is to be considered as the origin of the optic nerve, but differs from Gall and Cuvier, who suppose that the olfactory arises from the posterior.

He agrees very nearly in the description which Reill and Gall have given of the *optic thalami*. According to the former, they are destined to increase the volume of the fibres of the *crura cerebri;* to give them a greater extent, and a radiating or circular direction. The same observations are applicable to the *corpora striata.*

The Wenzels were the first to describe the *cornu ammonis* as a fold of the hemisphere formed by the expansion of the *crus cerebri*, and uniting with the posterior pillar of the *fornix* to form the *corpus fimbriatum*. Tiedemann considers the *hippocampus* as a mass of reinforcement for the posterior column of the *fornix*, being a thick stratum of grey matter deposited on the descending fibres of that part.

Gall supposes that, like other parts of his system of converging fibres, the *tuber annulare* arises from the grey matter of the convolutions of the cerebellum; Tiedemann asserts that it exists at a time when no grey matter is present there, and that it arises from the medullary centre of the cerebellum, increasing in size as that part and the hemispheres of the cerebellum are more developed.

The results of Professor Tiedemann's researches on the relations of the brain and spinal marrow may be reduced to the following points.—1. In the beginning of pregnancy about the second month, the brain is very small when compared with the spinal marrow, and is formed by the prolongation of the two principal portions of the spinal cord, namely, the corpora olivare and pyramidale, on each side, upwards and forwards. Its upper part is open, or properly speaking, forms a large tube, including the *third ventricle, aqueductus Sylvii, fourth ventricle* and *calamus scriptorius;* this tube is continuous with the canal extending through the spinal cord.

2. The cerebellum arises from the lateral part of the spinal marrow by a small flattened band on each side; these bands though originally distinct and separable without laceration, ultimately unite and form the lower part of the *fourth ventricle.* It is not until this time that the brain, viewed from above, ceases to represent a tube; and a little later the layers and ramifications of the cerebellum begin to shew themselves.

3. The mass which supports the *corpora bigemina* first presents itself under the form of two delicate membranes derived from the *corpora olivaria*, and which afterwards form the roof of a large ventricle, in progress of time gradually contracting into the narrow diameter of the *aqueductus Sylvii.*

4. The nervous cords of the *corpora pyramidalia* which take a direction from below upwards, and from behind forwards, after having formed two ganglia or enlargements on each side the *thalami optici* and *corpora striata*, are each expanded into a layer which turning from before backwards, and from each side upwards and inwards, constitute the beginning of each hemisphere of the brain. These membranes or delicate hemispheres are so small in the second month as scarcely to cover the *corpora striata.* As they increase they extend backwards, covering, in the

third month, the *thalami optici*, in the fourth, the *tubercula bigemina*, and in the sixth and seventh, the *cerebellum;* the lateral ventricles arise from their inversion.

6. The nervous fibres of the *corpora pyramidalia* previous to the formation of the *tuber annulare* are quite continuous with those of the *crura cerebri*, whence they may be followed by the eye through the *thalami optici* and *corpora striata* to their radiation in the hemispheres.

6. The parietes of the hemispheres gradually increase in bulk in proportion as their surface is covered by the deposition of additional strata of cortical matter; and the convolutions are not visible until towards the end of pregnancy.

From these facts he considers it as incontestibly proved that the brain and cerebellum are formed by, and are as it were prolongations of the spinal cord. This assertion is still farther confirmed by the examination of different individuals in the animal scale; the structure of the encephalon and spinal cord becomes more complicated as we pass from fishes to reptiles, birds, and mammalia. Besides the plates attached to the work, Professor Tiedemann preserves in his museum specimens of the fœtal encephalon in its various states, which he considers indispensable at a period when we too often find objects described and delineated which have no existence in nature.

We may in the last place remark, that in our analysis we have confined ourselves to the principal conclusions contained in the treatise, and comparatively neglected the purely descriptive portions, which, as must be evident, do not admit of abridgement, without considerable risk of being rendered obscure or unintelligible.—*(Journal For. Med. & Surg.)*

Case of Cancer of the Œsophagus.—Communicated by G. Sewell, *Esq. Surgeon, &c.*

John Hunt, ætat. 62, a smith, residing at 34, Gresse Street, Rathbone Place, applied for relief in Oct. last, at the Bloomsbury Dispensary; being unable to leave his bed, he was visited at his own habitation. On enquiry we found that he had been complaining of being unwell for the last three weeks, but had only kept his bed for three days; he complained of violent pains in the abdomen, which was considerably distended, but pressure gave him no pain; his bowels had not been relieved for ten days. Great anxiety was expressed upon his countenance—his skin was hot and dry, the pulse slow and labouring, and violent retching was excited whenever he attempted to swallow any kind of food, either in a liquid or solid form; he had taken no kind of nourishment for forty-eight hours, not from disinclination, for his desire for it was frequently evinced by repeated but ineffectual attempts to force down a little broth.

When I asked him whether he felt a sensation of hunger—he replied, 'it seems to be always gnawing,' at the same time placing his hand upon his stomach.

Two small pills of aloes and calomel were given to him, which he attempted to swallow but without success: an enema was then ordered, which brought away a considerable quantity of indurated feculent matter, from which he expressed some relief, and thought he should soon be well if he could eat some broth without retching.

I saw him the day following, his bowels had been relieved by fomentations and the warm bath, but no relief had been afforded to the most distressing symptoms: he passed a restless night, with excessive thirst and dryness of the mouth and fauces; his pulse was much weaker and more tremulous than on the preceding day; he became greatly emaciated in a short time, and seemed gradually sinking from inanition, expressing a conviction that he should not recover; and when requested to try and

take something, he declined, saying he was sure it was useless, and would rather not undergo the trial. He lingered till the next day when he expired.

Permission being granted to examine the body, the following appearances presented themselves :— our attention was first directed to the stomach, supposing it to have been the seat of the disease, but which we found perfectly healthy: on laying open the œsophagus extensive ulcerations had taken place at the posterior part; there were two or three small openings about the size of a pea quite through it, and several tuberculous appearances, which contained a thick and dark coloured matter, some of them were in a state of ulceration. The pharynx was healthy, as was also the cardiac orifice of the stomach.

The liver had the small tubercular appearance, which is often found in those who have been accustomed to drink freely of spirits. The spleen was much enlarged, and its capsules completely ossified: it was presented to Mr. Stanley, who pronounced it a very fine specimen. The other viscera were healthy.

May 10, 1823.

Death from Hæmorrhage, in consequence of having swallowed a needle. Communicated by Mr. W. Cox, *Fellow of the Royal College of Surgeons, St. Thomas's St. Borough.*

Elizabeth B—, a child of 7½ years old, swallowed about a month since, a needle, which she, during her work, was in the habit of putting into her mouth. The mother hearing the child scream ran to its assistance, but attempted in vain to extract the needle. A surgeon was then applied to, who also failed. During three weeks or more, the child suffered in a most distressing manner from every motion of the lower jaw, or attempt to swallow. At the end of this time Mr. Gale who was attending the mother, was requested also to see the child. It was then much emaciated, had anxious countenance and considerable enlargement of the absorbent glands about the angle of the jaw, on the right side, and inability to speak or swallow without excruciating pain. Mr. G. examined the throat, but could discover no impediment to the passage of food, and therefore confined his attention to the severe head ache under which the child laboured, and to the glandular enlargement. Nothing, however, gave relief. On the morning of the 13th of May, profuse arterial hæmorrhage took place from the mouth. Mr. Gale was immediately sent for, the hæmorrhage had ceased; he however adopted the means usually employed to diminish the force of circulation; still the bleeding returned the following morning, and the child sunk.

On examination of the parts about the throat, which were removed for careful inspection, I observed a kind of fistulous opening in the pharynx on the right side, passing between the thyroid cartilage and os hyoides; into this a probe was introduced to a considerable extent, which struck indistinctly upon a hard substance. Examination being pursued, the jugular vein was first laid open, but no unnatural aperture found in it, yet at its upper part the carotid had a thin and ecchymosed appearance, it was examined in the same manner and a plot of adhesive matter observed at its bifurcation, evidently the aperture by which the blood had passed. Upon cutting at the posterior part of the artery, a cavity was found about the size of a nutmeg, and surrounding the aperture.

It might appear at first, from the above case, justifiable to have attempted the ligature of the carotid artery, but from the situation of the needle, and also from the unnatural appearance in the jugular vein, I am induced to think such an operation would have been attended with the greatest uncertainty.

Borough, May 16th, 1823.

MELANGE.

Large Meteor.—A magnificent meteor was seen by Mr. Davenport, on the 28th October last, at about half-past five in the evening. It was seen from Silver-hill, on the Hastings road, and appeared as a luminous ball, of full one-third of the apparent diameter of the moon, giving a remarkably bright and white light. Its direction was north-east, its height above the horizon about 22°. It passed horizontally to the west, over an arc of about 22°, occupying about 8 seconds of time. Mr. Davenport is anxious to know whether other persons have seen the same meteor; and if so, from whence, and in what direction.—*Ann Phil.*

New Comet.—A luminous appearance was observed in the heavens, on the night of Wednesday, Nov. 13, at the distance of about a degree and a half from Cor Caroli, which very much resembled a small comet. It was viewed distinctly for ten minutes, from the hills in the neighbourhood of East Grinstead, but a veil of cloud then hid it, and it has not since been seen.—*New Monthly Mag.* ix. 33.

Magnetism of Solar Rays.—The Royal Academy of Sciences, at Lyons, have offered a prize of 300 francs, for an essay on the following subject. To shew by decisive experiments if the violet ray of the solar spectrum possesses the virtue of communicating magnetism to the unmagnetized needle of steel; if this virtue belongs to it, to the exclusion of the other coloured rays—and, in short, if this species of communicated magnetism, attributed to the violet light, is real or illusory. It is stated, that Professor Configliachi, found magnetism was communicated by every other ray of light.—Mémoires to be sent to MM. Mollet and Dumas, before July, 1823.

Fall of Rain in the Tropics.—Professor Silliman gives the following statement, on the authority of M. Rousuis, captain of a vessel. It is contained in a letter from Cayenne. "You will perhaps learn, with no inconsiderable interest, the following meteorological fact, the authenticity of which I am able to certify. From the 1st to the 24th of January (1820), there fell upon the island of Cayenne, twelve feet seven inches of water. This observation was made by a person of the highest veracity, and I assured myself, by exposing a vessel in the middle of my yard, that there fell in the city ten and a quarter inches of water, between eight in the evening and six in the morning of the 14th and 15th of that month."

The Zodiac of Dendera.—M. Lenoir, the superintendant of the monuments in the Church of St. Denis, at Paris, and to whom France owes their preservation during the Revolution, has published an Essay on the Circular Zodiac of Dendera, in which he shows that he is equally familiar with the monuments of antiquity. He considers that Zodiac as a simple calendar, on which the solar, rural, civil, and religious years are marked; and he fixes its origin in the reign of Bocchoris; that is to say, about 77 years before our era. In order to demonstrate the precise epoch of its construction, M. Lenoir avails himself of several of the astronomical signs, and of the sculpture of the monument, which he classes in that of the second Egyptian style; the perfection of which was manifested prior to the reign of Psammeticus, the first of the Pharoahs who permitted foreigners, and principally Greeks, to enter his dominions.—*French Journal.*

PHILOSOPHICAL SOCIETIES.

Royal Society.

(Continued from page 240.)

Mr. Faraday has succeeded in condensing chlorine into a liquid; for this purpose a portion of the solid and dried hydrate of chlorine is put into a small bent tube and hermetically sealed; it is then heated to about 100, and a yellow vapour is formed which condenses into a deep yellow liquid heavier than water, (sp. gr. probably about 1.3.) Upon relieving the pressure by breaking the tube, the condensed chlorine instantly assumes its usual state of gas or vapour.

When perfectly dry chlorine is condensed into a tube by means of a syringe, a portion of it assumes the liquid form under a pressure equal to that of 4 or 5 atmospheres.

By putting some muriate of ammonia and sulphuric acid into the opposite ends of a bent glass tube, sealing it hermetically, and then suffering the acid to run upon the salt, muriatic acid is generated under such pressure as causes it to assume the liquid form; it is of an orange colour, lighter than sulphuric acid, and instantly assumes the gaseous state when the pressure is removed. Sir H. Davy has given an account of this experiment to the above Society. It is probable that by a similar mode of treatment several other gases may be liquefied.

Geological Society.

April 4.—Two notices were read on a recent Ligneous Petrifaction. By the Rev. J. J. Conybeare, MGS.

A notice was also read, respecting a Mass of Quartzose Ferruginous Sandstone, occurring in the Limestone near Bristol. By George Cumberland, Esq. Hon. MGS.

April 18.—A letter was read, containing "A Description of Two New Species of Encrinus found in the Mountain Limestone near Bristol." By the same.

A letter was also read, "On the Geology of Pulo Nias, an Island on the Western Side of Sumatra." By Dr. Jack. (Communicated by H. T. Colebrooke, Esq. MGS.)

A paper was read, "On the Geology and Geography of Sumatra, and some of the adjacent Islands." By the same.

University Intelligence.

OXFORD, April 19.—The following degrees were conferred.

Doctor in Medicine—F. Hawkins, Fellow of St. John's College.

April 26—*Bachelor in Medicine*—J. Bamfylde Daniel, M. A. of Christ Church.

Prussian Universities.

During the six months' term of the summer of 1822, the University of Berlin reckoned 1,182 students, of whom 109 were foreigners; 227 attended the courses of Protestant divinity, 411 applied to jurisprudence, 370 to medicine, and 174 to the philosophical and philological sciences. The following was the state, during the same term, of the other Universities of the kingdom. Bonn had 571 students, of whom 80 were foreigners, included in the numbers of the following classes, viz. divinity 151, jurisprudence 206, medicine 15, philosophy and philology 84.—Breslau had 529 students, of whom 60 were foreigners; 231 in divinity, 159 in jurisprudence, 46 in medicine, and 100 in philosophy and philology. The University of Halle, in 866 pupils, counted 147 foreigners; 540 students of divinity, 198 of jurisprudence, 78 of medicine, and 50 of philosophy and philology. That of Koenisberg had but 259 students, of whom 29 were foreigners; 84 belonged to divinity, 95 to jurisprudence, 20 to medicine, and 60 to philosophy and philology. The state of the Univerity of Greisswalde is unknown; there is even reason to apprehend its suppression. From what we have stated, it results that in 1822 Prussia reckoned in all 1236 students of divinity (of which number only 193 were Catholics,) 1069 of jurisprudence, 644 of medicine, and 468 of philosophy and philology. To these may be added, and in the same proportions, the few students who were assembled at the University of Greisswalde.

Leipsic Periodical.—M. de Müller has just published the first and second Numbers of a periodical work, called '*Hecate*,' a weekly and literary journal, edited by the Shade of Kotzebue.

Copenhagen.—Two literary men of the same name, Messrs. Holst—the one a Doctor of Laws, well known in Denmark by his writings, the other a Doctor of Medicine, intend to publish a periodical journal, to be called "Musée du Nord," in order to apprise German readers of the best literary productions of Denmark, Norway, and Sweden.

MARRIED.

On the 17th instant, at St. John's, Wapping, by the Rev. P. Price, M. A. Mr. D. Price, Surgeon, Upper East Smithfield, to Matilda Sophia, daughter of the late Mr. W. Simpson.

On Tuesday, the 20th instant, at the Church of St. Nicholas, in the City of Worcester, by the very Rev. the Dean, Charles Hastings, M D. son of the Rev. James Hastings, Rector of Martley, in that county, to Hannah, eldest daughter of Dr. Woodgatt, of Worcester.

TO CORRESPONDENTS.

The Communication relative to a case of abscess of the pancreas is deferred this week in consequence of a press of other matter previously received.

X.X. D.D. is under consideration.

We have just received information of a lamentable case of a woman and two children having been nearly poisoned by some deleterious quack medicine, in which the BUCHU LEAVES *are supposed to have been a principal ingredient. But as we are promised further particulars we forbear at present entering into any detail of the circumstance.*

M. R. and A. C. will receive the Magazine through the channel they have pointed out.

The substance of Dr. Gall's Lectures will be continued weekly, &c.

In reply to V. J. D. we beg leave to state, that all communications forwarded us, that are not considered of sufficient importance for insertion, are expected to be withdrawn within a month: whenever this is not the case, they are burnt; consequently the article enquired after, must doubtless have been consigned to the flames.

London:

Printed by E. JUSTINS, 41, *Brick Lane, Spitalfields.*

Published by COX and SON, St. Thomas's Street, and 39, High Street, Southwark. Sold also by Sherwood, Neely, and Jones, Paternoster Row; Simpkin and Marshall, Stationers' Court; Callow and Wilson, Princes' Street, Soho; John Cox, Berner's Street, Oxford Street; E. Willson, Corner of Royal Exchange; Chappel, Cornhill; W. Turner, Cheapside; T. Boys, Ludgate Hill; H. and W. Smith, 192, Strand; G. Roake, 31, Strand; W. Sams, St. James' Street; W. Stewart, South Bridge Street, Edinburgh; Hodges and M'Arthur, Dublin; &c. &c.

THE WEEKLY

MEDICO-CHIRURGICAL & PHILOSOPHICAL MAGAZINE.

No. XVII.] SATURDAY, MAY 31, 1823. [*Price* 4*d*.

" FLORIFERIS, UT APES, IN SALTIBUS OMNIA LIBANT
OMNIA NOS, ITIDEM, DEPASCIMUR AUREA DICTA."

DR. GALL'S LECTURES,

(Continued from page 247.)

A second course of these lectures commenced on Monday last, at half-past two o'clock, at Bossange and Co. Great Marlborough Street. Among the numerous and fashionable attendance on this occasion, we observed the following distinguished personages, viz. the Count and Countess Lieven, Baron and Baroness Werther, the Duke and Duchess of San Lorenzo, Baron Just, Counts Colloredo and Marcellus, Sir Geo. Tuthill, Sir Alexander Crichton, Baron Stiernold, Count Mandelsloh, with many others of distinction, whom we could not then identify.

The interest excited by these lectures can only be felt by those who hear and know how to appreciate them;—the insinuating and agreeable manner in which they are delivered, the naiveté with which the various incidents are detailed, steal so insensible upon the auditors, that two or three hours glide away imperceptibly in listening to the episodes with which the lectures, sufficiently interesting in themselves, are interlarded, and in examining and comparing the individualities of the sculls of such as have been remarkable during life for certain propensities, faculties, degrees of intelligence, &c. In short, the patience and curiosity of the hearer are never exhausted, but always kept on the alert by some new and agreeable incident, wrapt up in the pleasing guise of familiar conversation, illustrated by anecdote and *saillies d' esprit*, which, if they do not " set the table in a roar," keep up, at least, that continual glow of cheerfulness and good humour that plainly pourtrays every body is pleased, gratified, and instructed.

Dr. Gall speaks the French language with fluency and correctness. It has, moreover, been remarked, that during a lecture of upwards of two hours he was not observed to have made use of one superfluous expression or repetition. His eloquence is uniform and manly; his terms are varied and expressive; and the whole flow from him with such admirable ease and perspicacity, clearness and energy; whilst his manners are so truly affable and courteous to every one, as to elicit admiration for his talents on the one hand, and on the other, the highest respect for him as a man possessing faculties, probably, as extraordinary and rare as the very doctrine he professes to teach.

MORAL PART OF THE PHYSIOLOGY OF THE BRAIN.

Of the nature of Man, and the difference between Animal and Vegetable Life.

This interesting subject forms the text of Dr. Gall's opening lectures. He commences by observing, that the ensemble of the phenomena which are carried on in man, from the moment of conception until death, constitutes the nature of man; he observes, that all these phenomena are probably the result of one and the same principle, but that they are manifested under forms and conditions so different, that, to acquire a clear and detailed knowledge of them, they must be examined under as many various points of view as their manifestation presents different forms and conditions; and, that man must be studied in all his relations, and in

all his points of contact with entire nature. Enumerating some of the principal organizations of the vegetable kingdom, such as fecundation, assimilation, nutrition, growth, a species of circulation, secretions and exertions, irritability, and elective force, or the faculty of placing himself in relation with objects beyond his sphere; of choosing, for example, the most convenient nourishment, of attaching himself to surrounding objects, of avoiding or courting the light, &c. &c. He observes that all these operations take place from blind necessity, without sensation, sensibility and volition. For which reasons, life is acceded to the vegetable kingdom, although it is a life purely organic, automatic, and vegetative. The same functions are exercised in animals and men, who equally partake of a vegetative and automatic life with the vegetable kingdom; although the former enjoy functions of a more elevated order and essentially different: they enjoy the faculty of sensibility, of perceiving external and internal impressions; they are conscious of their existence; they exercise voluntary motions, functions of the senses; they are endowed with an industrious aptitude, with instinct, inclinations, talents, moral qualities, and intellectual faculties.

As soon as one or more of these functions are manifested in a being, he is supposed to enjoy *animal life*. As it was thought that all these faculties were produced by external impressions upon the senses, it was called by the name of *life of relation, external life*. It may be asked by those not conversant with the study of natural history, which is the organ or organs of animal life? By what natural means has it realized all the phenomena from simple sensation to the more complicated moral qualities and intellectual faculties?

These means, these organs, Dr. Gall observes, are quite a particular apparatus with which vegeto-animal plants are yet deprived; viz. the nervous system, without which, there can be no industrious aptitude, instinct, inclination, sentiment, talent, moral quality or intellectual faculty, affection or passion.

Dr. Gall then proceeds from the simple to the compound, by giving some tokens relative to the nervous system by which the animal character commences, but whose functions rather belong to vegetable than to animal life.

"The organs of either the one or the other life, cannot fulfil their special functions," he observes, "but in proportion to their developement and their organic formation. Before the liver, stomach, and loins are formed, no secretion of bile, gastric juice or urine can take place; the same with respect to inclinations and talents, which cannot manifest themselves before the brain is developed."

(Here let metaphysicians pause awhile, and until they can give some more satisfactory history of the separability of mind and matter, let them be silent on the subject.)

Dr. Gall, in reply to the question whether the fœtus, the infant, during the time it is shut up in the womb of its mother, enjoys an animal or a purely automatical life, and of the manner in which its destruction ought to be judged before the tribunal of sound physiology, observes that "those who maintain that animal life is nothing more than a life of relation—an external life; that all our moral qualities and intellectual faculties are produced from impression upon the five senses, ought also to maintain that the fœtus and the new born child are still but automatons; the destruction of which has no reference whatever to an animated being. Prochaska says, "in a fœtus and new-born child, the muscles have an automatic and not a voluntary motion, because the brain is not yet capable of thinking." Bichat likewise asserts that "we may conclude, with certainty, that animal life in

the fœtus is null; that all the acts attached to this age are within the dependance of organization. The fœtus, if we may use the expression, has nothing connected with its phenomena of that which especially characterises the animal character; its existence is the same with those of vegetables. Between the cruel alternative of sacrificing the child, or of exposing the mother to almost certain death; the choice ought not to admit of a doubt. *The destruction only bears upon a living and not upon an animated being.*"

Dr. Gall on this subject observes, that without doubt it is hard to sacrifice inhumanly a mother for a feeble fœtus, still threatened with numberless dangers, and on the life of which it is still so difficult to pronounce any decision. It is only, he says, certain religious ideas, or reasons of an ambitious policy, which could command the sacrifice of the mother in the most interesting moment of her life, for the more precarious existence of the child.

Still as the expressions of Bichat, "*the destruction only bears on a living and not upon an animated being*," might carry with them some illicit abuses, Dr. Gall has thought it his duty as a physiologist to rectify his arguments as well as those of Prochaska.

"I have just observed," says Dr. G. "that neither organic nor animal life are developed all at once, nor do they enjoy their activity simultaneously. If organic life were to be denied to the fœtus, because several visceral functions have not yet taken place, this conclusion would soon be exclaimed against. Is there any better foundation for refusing animal life to the fœtus or new-born child because its brain is not yet formed for every talent, or for the faculty of thinking? Had physiologists been sooner acquainted with the plurality of the cerebral organ and their functions, had they been taught that the different organs of the brain are only simultaneously developed; had they distinguished the different degrees of conscience, sensation, desires and wants, from thought or reflection, they would have been careful how they asserted that animal life did not exist in the fœtus or new-born child. The brain of these beings is not sufficiently developed to have ideas, to unite and compare them; but were this degree of perfection necessary to grant sensation and desires, it would be difficult to determine when animal life commences, and when the destruction of an infant bears upon a living animal, and becomes a criminal act. The infant has not yet the faculty of reflexion or of imagining; it still feels no attraction for another sex; it is not yet ambitious, &c. But can the faculty or perception, memory, inclinations, aversions, joy and grief, be refused to it? If the most noble functions of the brain exact a certain developement and consistence, who is able to determine the degree of developement and consistence necessary for functions of an inferior order? The new-born child does not manifest by its features, its motions or cries, either pain or comfort; it manifests only the desire of sucking its mother's milk. Moreover, the whole of this work will become an irrefutable proof that there exists internally, an infinitely more fertile source of sensations than that of impressions upon the five senses; that, consequently, it is entirely false to say that animal life only begins with the action of the external senses.

These considerations will be sufficient to prove that the laws of animal organization come in no manner to the support of the dangerous principles professed by some physiologists.

Dr. Gall next alluded to the functions of man and animals appertaining to animal life, or the special functions of the brain. And

after an inquiry whether it be permitted, or whether it is even necessary to compare men with animals in order to acquire a perfect knowledge of his moral and intellectual nature; he proceeds to treat of the origin of industrious aptitudes, instincts, propensities, talents in general, of the moral and intellectual faculties of men and animals.

"Is man born," he asks "without determinate faculties? does he bring into the world with him the dispositions which he manifests at a later period; or does he only acquire his faculties by his relations with the external world? how far are the impressions made on the senses the source of his sensations and ideas? what is the origin of moral good and moral evil? is a man born entirely good or entirely wicked, or with a mixture of contrary dispositions? are all men in the same degree, gifted with the essential qualities of their nature, or are the differences that are observed due to the influence of accidental causes posterior to birth? or, on the contrary, are these differences determined from the mother's womb? and, if they are innate, how are they to be cultivated, brought to perfection, repressed, and directed according to individual want and the general good?

When these questions are resolved they must infallibly lead to the knowledge of the real sources of our inclinations and faculties, consequently to the *primum mobile* of our actions. They deserve then the most serious attention on the part of religious and moral teachers, judges, philosophers, and physicians.

Dr. Gall, after having treated of industrious aptitudes, inclinations, talents, the moral and intellectual faculties, in general, of men and animals, and that these are innate, proceeds to the senses and sensations received from external impressions, which he asserts cannot give rise to any of the preceding faculties —he then proves, in opposition to those who state that the intellectual faculties of man, proceed from the acuteness, and greater perfection of his senses, that the five senses are almost all more fine and perfect in the different kinds of animals than in the human species, by entering into a separate detail of each sense. With respect to taste, for instance, he has proved that birds and fishes are equally in the enjoyments of it as well as the mammiferæ.

He has shewn that the sense of smelling is the first sense that gives betimes to men and animals the idea of distance; and that it is not by the means of smell that animals find their way back to their habitation from distant parts, after a certain length of time, and that carniverous animals have, in this respect, a more acute sense of smelling than the graminivorous. He has also demonstrated, that it was an error hitherto to have attributed the talent of music to hearing, and that of singing to the glottis; that it is not hearing that gives the capacity of language—consequently it is not to it that we are indebted for the ideas and attainments which, in the ordinary state of society, are conveyed to our senses by the means of language; that languages, however perfect or imperfect they may be, are not a creation of the sense of hearing, but of cerebral organization; that the irresistible and illegal acts of certain deaf and dumb persons ought not to be imputed to a defect of hearing, but to the imbecility with which they are sticken, &c. &c.

Having animadverted on the different senses, more particularly on that of feeling, he next goes on to prove that education brings to perfection, deteriorates, compresses and directs the innate faculties, but that it can neither destroy nor produce any one of them.

"If animals were susceptible," observes Dr. Gall "as much as they are presumed to be, of receiving im-

pressions from every thing that surrounds them, so as to draw lessons from them, why does not the hen learn to imitate the cooing of the pigeon? why does not the female nightingale imitate the song of the male? how does it happen that every animal, notwithstanding its frequentation with species differing from its own, preserves its particular manners. Why do birds and the mammiferæ, although hatched and suckled by different mothers, always manifest the distinct nature of the species to which they belong? why does the cuckoo not imitate either the nest in which it is hatched, or the song of the bird that brought it up? how do we teach the squirrel, which was taken blind from its nest, and which has never seen another squirrel, to climb and leap from one branch of a tree to another? how do we inculcate the ferret with the instinct of seeking the rabbit in the warren? who taught ducks and beetles to counterfeit death whenever they are threatened by an enemy? who gave lessons to the spider which, scarcely out of the egg, weaves a web, in which it envelopes the captive flies to prevent them from drying? from whom did the ichneumon-fly learn to tie the caterpillar, in which it has deposited its eggs, to the branch of a tree; and who taught the caterpillar as soon as it is born to wrap itself up in a leaf to preserve itself from the cold and moisture of the winter? lastly, why do animals do things which they never saw done before, and why, from the first time, do they do them almost as well as the author of their days, &c. &c.

"Without the inneity of the animal faculties, how should we explain, who have absolutely the same manner of living? why, in a forest, one nightingale sings better and more assiduously than others; why, in the same flock, a ram, an ox, are more wicked than their companions; why, in a yard, one cock is more ardent for combat whilst another is more pacific; why one hen or cow are better mothers than other hens and cows: can these phenomena be attributed to education?

How are we to understand why certain individuals are elevated above their equals, and become, if we may be allowed the expression, the genii of their species? Coste, the translator of Locke, mentions a dog which, during winter, whenever the other dogs were lying round the fire, so as to prevent him from getting near it, began to make a noise in the yard: and during the time his companions in the house were running to the spot, he hastened into the house and took the best birth near the fire, leaving those to bark he had deceived by this stratagem. He had frequent recourse to the same means, yet always obtained his ends; but none of the other dogs had sufficient intelligence to detect the trick. Dupont of Nemours had a cow which, in order to procure the most abundant nourishment for the whole flock, alone conceived the idea of breaking down with her horns, the fence that enclosed a field. None of her companions could imitate her, and when they came near the enclosure, they waited impatiently for the arrival of their conductress.—I have frequently met with mocking birds that could imitate perfectly well the birds of the suburbs, even to the quail and cuckoo, whilst others, surrounded by the same birds, imitated either very few of them, or were even limited in their own natural song.

Lastly, if the instincts, inclinations and faculties of animals are not determined by their organizations, how will you explain that those instincts, inclinations and faculties are always found in harmony with their external organs. What chance could give to each animal factitious instincts, faculties always in accordance with their teeth, claws, horns, &c.? Will you maintain that nature acts without aim by giving strong gnawing teeth

and a flat tail to the castor— a proboscis to the elephant—to the sanguinary tiger its teeth and terrible claws? or will you tell me with those that do not acknowledge final causes, that the castor, the tiger, and the elephant employ their instruments merely because they are found adapted to a certain purpose? the mole lives under ground because its eyes are too small: the feet of the swan are natural oars, and that is the reason she has chosen her habitation on the water. Neither man nor animals have any member or instrument to make use of, but they use them because they have them. Who does not perceive that under this supposition there would be no connexion between the internal and external, between the instruments and the active voice? and can it be forgotten that the young wild boar strikes with his jaw bone before his tusks exist; the young bull and goat do the same with their head before their horns have sprung out; that bird flaps its wings before they are feathered, &c. &c. Draw out the lion's teeth and claws, and give them to the sheep, and see, if, by this means, you can change the one into the other.

"It must then be admitted that every animal, in virtue of its organization, has received from nature industrious aptitudes, instincts, inclination, peculiar determinate talents, and that the power of external things and of the institution of education, are confined to modifying them more or less, &c."

(To be continued.)

MEMOIR.

(Continued from page 227.)

Against this doctrine of simple distension, it is contended by Dr. Gordon, *first*, that the brain is unable to bear it without suffering extensive laceration, and yet that no such effect is perceptible either on the ventricles or elsewhere; nor is there any rupture of vessels, either in the substance of the brain or in the *pia mater*; *2dly*, that the ventricles are sometimes enlarged by fluid without any corresponding enlargement of the brain externally; and, in a case that occurred to Reil, where the brain was greatly enlarged from the presence of water in the ventricles, the convolutions were not at all split up or otherwise affected—conditions quite incompatible with the foregoing hypothesis of simple distension; *3dly*, that the blood-vessels cannot, by any conceivable calculation, be imagined capable of exerting a power equal to the effects produced, especially in advanced stages of the disease. As to the assertion, that the two layers of the convolutions are unfolded in the progress of the disease, it is sufficient to remark, that this is advancing one supposition on another equally groundless, for such a structure has no foundation in fact; or, even granting that it had, there is no force operating from the ventricles, which could effect the separation of the two layers, without producing laceration of the thick stratum of cerebral substance everywhere interposed between the surfaces of those cavities and the bottom of the convolutions; yet such laceration is never remarked in hydrocephalus. That there is no loss of substance in a hydrocephalic brain, in any stage or degree of the disorder, as Gall and Spurzheim assert, is maintained to be a position not only without proof, but demonstrably incorrect. And as to the argument for that opinion, derived from the circumstance, that persons affected with hydrocephalus have often preserved their faculties for many years, Dr. Gordon replies, with the Committee of the French Institute, that as we 'do not know with what part of the brain, 'nor with what circumstance of its organization these faculties are connected, 'we can draw no conclusion from it relative to the essential structure of the 'brain.'

'The agents,' continues Dr. Gordon, 'by which these singular changes are accomplished on the cranium and its contents in this disease, are imperceptible 'to our senses; but there is only one 'theory with respect to them which will 'explain the phenomena. They can be no 'other than the secreting and absorbing 'vessels of the parts which are affected: '—Those very powers, the balanced and 'reciprocal actions of which, in the growth 'and modelling of the healthy machine, 'have been so well demonstrated by Mr. 'Hunter, and of which, the modified operations are more or less disclosed in al'most every instance of local disease:— 'those agents, for example, which preserve 'to the thigh-bone its peculiar form and 'structure throughout the whole period of

'its growth, while they are the very 'powers by which its growth is accomplished—which occasion the disappearance of the alveolar arch in old persons, 'and make way for the rising teeth in 'young ones—which throw off a slough 'from a sore, or an exfoliation from a 'bone—which cause a lung to waste without hemorrhage—which enlarge an ovary 'until it forms a bag as large as the abdomen—or thin the substance of a kidney until it is reduced to a mere membrane.'

Beside these more important features, there are some minor points in dispute which an actual reference to dissection can alone ultimately decide.—Such are the questions, whether the medulla oblongata, the crura cerebri, and the thalami optici really possess the large quantity of *grey* matter in their substance which these anatomists affirm—whether, also, as they assert, these thalami have no connexion, by means of fibres, with the optic nerves, or whether the fibrous connexion between these bodies and the optic nerves, described first by Vieussens, and subsequently confirmed and extended by Reil, be just;—whether the body called fornix be composed of fibres derived from the posterior convolutions of the middle lobes, as Gall and Spurzheim contend, or consist of fibres which begin at the extremity of the *pes hippocampi* in each lateral ventricle, and end in the thalami optici, as Reil is said to have shown;—whether, farther, the fibres of the opposite halves of the fornix remain quite distinct, without crossing over the median line, as the same anatomist affirms, or intermingle with each other, so as to form a commissure, as the system of Gall and Spurzheim requires;—whether the bodies called corpora dentata and corpora olivaria, consist entirely of *grey* matter, and have the size and figure represented by Spurzheim and Gall, or are much smaller in size, and composed of a nucleus of *white* matter, enclosed in a capsule of brown, as described and delineated by Dr. Gordon, and also by Vicq d'Azyr;—whether, again, as these anatomists affirm, the annular protuberance contain a very large quantity of grey matter, or only a very small portion of that substance, as others maintain:—And, *lastly*, whether the fact, of grey matter being at all seen in this protuberance, do not depend on the mode in which its section is made: for as Dr. Gordon was, we believe, the first to observe, and has delineated in fig. 5th and 6th of his Observations on the Structure of the Brain—'Every particle of the substance which 'appears *grey* when the protuberance is 'divided vertically, may be shown to consist of transverse or horizontal fibres, 'coming from the peduncles of the cerebellum, which uniformly present this 'dark appearance when they are divided 'directly across, although they are as 'white as the whitest nervous substance, 'when cut in a direction parallel to their 'length. It is only when divided in a direction exactly parallel to their course, 'that the fasciculi continuous with the 'pyramidal bodies themselves appear of a 'white colour: if they are cut across, or 'horizontally, they exhibit a grey hue; so 'that the colour of the different sets of 'fibres in the annular protuberance, depends entirely on the section which is 'made of them. In a vertical section of 'this body, the fibres continuous with the 'corpora pyramidalia are white, and those 'connected with the peduncles of the cerebellum grey. In a horizontal section, 'it is exactly the reverse; the former are 'grey, and the latter white.'

(To be continued.)

History of a painful and obstinate Affection of the Brain, which ultimately yielded to the unremitting Application of Cold, and the continued erect Position for a week. By G. D. Yeats, M.D. F.R.S. *Fellow of the Royal College of Physicians, &c.*

I was consulted by H—— J——, Esq. aged 40, on the 14th February, 1819. He complained of general uneasiness, not easily defined, in the region of the stomach, with a languid and sinking feel there. The tongue exhibited that furred and clammy appearance common in disturbed digestion; the appetite was not impaired, but he felt uneasy after his meals, which induced him to indulge in wine at dinner, as the stimulus of it gave temporary relief; he was troubled with frequent head aches. The bowels were costive, and very irregular in their movements, a properly-figured evacuation being seldom passed, and the passing the contents of the intestines caused uneasy sensations of fulness about the head; the fæces were likewise very morbid in appearance. The urine was not much altered in quality or quantity; the pulse did not particularly indicate disease. On examining the abdomen, no fulness was perceptible, but a soreness was

complained of, and some hardness felt on pressure on the right side, in the region of the liver. He had become considerably thinner, and had suffered from the above complaints for a long time, and had taken the advice of several professional gentlemen. By attending to the condition of the lower intestines and digestive organs, with the proper evacuants and alteratives, more comfortable sensations were acquired there; but the head now principally arrested attention on account of the great uneasiness complained of in it, which rendered it necessary to have recourse to the local detraction of blood, and to a constant soluble state of the bowels, by cooling laxatives, and a restricted diet. He left town in March, on professional business at Cambridge.

May 5.—Up to this day I had seen Mr. J——— two or three times after his return to town. He had been cupped, and bled, and blistered, before and since I saw him, and his bowels had been attended to by evacuants, with very little relief to the affection of the head, beyond some temporary ease, and sometimes without this. At this date, May 5, 1819, the affection of the head had evidently increased; the pulse had become somewhat quicker and harder, and he described the distress in his head in the following manner:—A pain, with heat, would commence in the back part of it, deep seated, and would be diffused gradually throughout the whole of the back part of the brain, which would continue sometimes for two hours, causing insufferable distress within the scull, but confined, as it would seem, to the cerebellum, as the crown and fore-part of the head were not affected. A horizontal position increased this suffering, and it was most acute about three or four o'clock in the morning, after he had slept for some hours. He felt considerable giddiness and confusion in his head when he stooped upon any occasion. The symptoms evidently indicated bleeding, but he would not submit to it in any way, from the failure of these means to procure relief on former occasions. His sufferings and his danger, too, being now greatly multiplied, he submitted, after much persuasion to the following plan:

At my request a seton was inserted in the neck, by Sir Astley Cooper. Mr. J. was confined entirely to vegetable and farinaceous food; barley-water, rennet whey, and such like, being his only beverage, and he was desired to keep *continually* in the erect position with his body, by sitting in a chair, not going to bed at all, and to keep his head, which had been shaved for the purpose, *unremittingly* moistened with a cold lotion (a solution of muriate of ammonia, in vinegar and water). I put him upon this plan from the idea that the blood did not readily find an exit from the head, in the tortuous and complex circulation of the brain, in the horizontal position; and, 2dly, the veins of the brain had become weakened, from the long state of distension in which they had existed; they had not, therefore, sufficient power to propel their contents against gravity, while the body was in the recumbent position, which, at the same time, favoured the transmission of the blood to the head by the arteries; thus there was a supply, without a corresponding discharge. The erect position facilitated the return of blood from the head, while it assisted to impede its progress thither, and the coldness of the lotion gave a contractile power to the veins, diminished their calibre, thus accelerated the transit of the returning blood, and prevented the accumulation and the consequent pain.

The happy practical effect fully confirmed the soundness of the doctrine. From the ease which this plan very speedily produced, Mr. J. very readily submitted to a perseverance

in it, and for one whole week he never once lay in a horizontal position, and the application of the lotion to the head was never omitted during the whole of that time. He occasionally walked about the room for relief. At the end of the week he was so much better that the plan was gradually omitted; and the best symptom of amendment was, that he was able to sleep horizontally, awaking without pain. I am well aware of the excellent effects of the application of cold in that excited state of the brain, which in children and others so often ends in effusion of fluid there, but I do not recollect to have met with so long continued and obstinate a pain within the head, connected, too, with such great derangement in the digestive organs, in which the erect position, with cold applications was so long persevered in, and with such decided and permanent benefit. The seton was not withdrawn till the 6th of July, a period of two months from its first insertion. The only medicines taken were, a solution of the supertartrate of potash as a diuretic (to obviate the accumulation of fluid in the brain, for in almost all cases of severe affections of this organ, more or less of effusion of fluid takes place,) and occasional purgatives when necessary. This gentleman remained free from his complaint up to last year, since which time I have not heard of him.

DOCTOR PARIS ON ANTIDOTES.

(Concluded from page 251.)

Baryta, and still more actively its muriate, produce similarly deleterious effects, whether internally or externally applied; and, like arsenic, it affects life by rendering the heart insensible to its blood. The same observations will apply to the operation of tartarized antimony.

Corrosive sublimate of mercury, and some othor poisons, produce their destructive effects, not by impression on the nervous system, nor by entering the circulation, but by inducing local injury on the mucous membrane of the stomach.

Having thus offered a summary of our present views respecting the physiological action of poisons, we are prepared to lay down a general plan of treatment, which it will be seen, can only be successful when conducted on principles strictly conformable with the just notions which the preceding experiments have so satisfactorily established.

Where a poisonous substance has, either through accident or design, found its way into the alimentary canal, three important indications are, if possible, to be fulfilled: and under these heads I shall offer such observations as may serve to instruct the practitioner in the philosophy of the general treatment, reserving the details to be observed in that of each poison, for more particular notice in the second part of the work, where the history of these substances will be individually considered. The indications to which I allude are the following: viz.—

1. *The immediate ejectment of the poison from the body, by the operation of vomiting and purging.*—Whatever may be the nature of the poison, we should endeavor, with all possible expedition, to eject it from the body; and upon the promptness with which this is effected the safety of the patient will generally depend; for the dangerous effects of such substances advance in a very increasing ratio, with the time they remain in contact with a living surface. A question may arise, whether in some cases it would not be judicious to attempt, in the first instance, the neutralization or decomposition of the poison. Where a mineral acid or a caustic alkali has been swallowed, it would undoubtedly be right to neutralize and dilute it as soon as possible, and then to excite vomiting, which may be advantageously effected by thrusting the finger

down the throat, or by tickling the internal fauces with a feather. Where an emetic is at hand, whatever may be its nature, it should be promptly given; but, if circumstances will allow us the opportunity of selection, antimonials, ipecacuanha, &c. should be rejected, and sulphate of zinc and sulphate of copper, for several reasons, be preferred: in the first place, they do not require much dilution for their action,—a circumstance of no small importance in the treatment of poisons that act by being absorbed; in the next place, they are extremely expeditious,—a dose of fifteen or twenty grains producing almost instantaneous vomiting, without exciting that previous stage of nausea which so frequently characterizes other emetics, and which occasions a state of the vascular system highly favourable to the function of absorption. After all has been ejected which the operation of vomiting can effect, we are to proceed to the fulfilment of the second indication, viz.—

2. *The decomposition of the remaining portion, and the adoption of measures best calculated to obviate its absorption.*—Where the substance is in a solid form, and acts by absorption, we should be very cautious how we favour its solution; while, if it exists in a liquid state, our object must be to render its active portion insoluble: this problem involves a series of questions which are wholly chemical. In order to prevent, or retard, the absorption of the active matter, we must, to a great degree, depend upon the agency of vital adjuvants. This latter indication, however, does not apply to corrosive sublimate and other substances which act upon the stomach locally, and are not absorbed. Copious dilution also, in such cases, will frequently disarm the poison of its virulence; but it should be followed as quickly as possible by vomiting. In cases where the poison requires to be absorbed before it can display its energies, it would be generally unsafe to administer any solvent. Alkaline solutions and magnesia, in cases of the ingestion of arsenic, accelerate its fatal effects, by promoting its solution; whereas lime, or its carbonate, has an opposite tendency, in consequence of the insolubility of arsenic of lime: so again, Orfila has shown that the pernicious qualities of the muriate baryta are counteracted by the administration of any soluble sulphate, which renders the former substance insoluble. In cases where verdigris has been swallowed, the administration of vinegar greatly increases its virulence, as M. Drouard has ascertained, by converting the substance into a soluble acetate of copper. This view of the subject will explain why the pure earth of baryta is so slow, and comparatively inert, in its effects upon the system, while its muriate is distinguished by the extreme rapidity and virulence with which it operates. The propriety of administering vinegar, lemonade, and different acid potations, in order to counteract the baneful effects of opium, which has been so often questioned, will thus also receive ample explanation. It must appear that, if any quantity of the substance of opium remain in the primæ viæ, acid or mucilaginous drinks will, by favouring its solution and absorption, accelerate its fatal effects; but, should it have been previously ejected from the stomach, that then the anti-narcotic influence of a vegetable acid may remove the consecutive stupor and delirium. * * *

Chardin, in his travels through Persia, informs us that, when a Persian finds himself in a distressed situation, he has recourse to a piece of opium as large as the thumb, and that immediately afterwards he drinks a glassful of vinegar; by which he is thrown into a fit of laughter, terminating in convulsions and death.

With regard to the use of antidotes, it has been already stated how little they are to be depended upon: in certain cases, however, we are bound to acknowledge their power, but they should be very rarely trusted, unless subsequent to, or in conjunction with, the operation of an emetic. In many cases, the effects of this latter remedy may be promoted by the ingestion of liquids holding the particular antidote in solution,—a practice which offers the double advantage of accelerating the elimination of the poison, and at the same time of decomposing any which may remain. Orfila has fully established the fact of albumen being a counterpoison to corrosive sublimate: vomiting may, therefore, be very judiciously promoted, in cases of such poisoning, by water holding the white of egg in solution. With equal effect, where verdigris has been swallowed, sugared water may be used as a diluent to encourage emesis; and muriate of soda in solution will be found the most efficient antidote to nitrate of silver; and sulphate of magnesia to acetate of lead. Where an emetic salt, like tartarized antimony, has been taken, copious dilution with common water will, in general, so provoke vomiting, as to render it its own antidote; but it may be useful to remember, that the infusion of galls, and, according to Berthollet, the decoction of bark, at the temperature of from 30° to 40° Fahr., have the power of decomposing it; while Orfila considers milk the most efficient counterpoison to the sulphate of zinc.

Having ejected from the stomach all the poisonous matter we can by vomiting, and attempted to decompose what remains, we are to pursue such measures as may be calculated to prevent the absorption of the poison into the circulation: it has been already observed that, on this account, nauseating emetics should be avoided. Venesection proves one of the most powerful means of exciting the function of absorption; hence, in poisoning by arsenic, such an expedient should never be recommended while a particle of that substance remains in the body; where corrosive sublimate has been swallowed, the same precaution is unnecessary. The last indication which remains to be fulfilled is—

3. *To anticipate the occurrence of the consecutive phenomena, and to combat them by an appropriate treatment.*—This is to be conducted on the general principles of therapeutics: the treatment must necessarily vary in each particular case. When the exhaustion of nervous energy is to be feared, (as after poisoning by prussic acid,) ammonia and other diffusible stimulants will furnish the best resource: where, on the other hand, inflammatory action is to be anticipated, it is unnecessary to detail the plan of treatment which may be adopted with the greatest chance of success. In cases where the nervous system is stupified, the symptoms may be combated by vegetable acids, infusion of coffee, &c. but where it is in a state of preternatural excitement, recourse must be had to opiates.

REMARKS ON PNEUMONIA.

The following cases treated at Fort Pitt Hospital, by Dr. Forbes, M.D. *Deputy Inspector of Military Hospitals, in which blood-letting was freely adopted, are sufficient to illustrate the practice recommended.*

I have, on former occasions, strongly urged the necessity of copious blood-letting in this disease, and stated how far preferable one full bleeding is to small and repeated evacuations, even although amounting in the aggregate to a greater abstraction. I have now only to state, that, when there is not something very striking to contra-indicate it, the blood is permitted to flow *pleno rivo*, until respiration is performed without pain, and the pulse reduced in force and frequency.

Should syncope occur previous to these effects being produced, the flow of blood is stopped until the patient recovers, and is then permitted to go on again; and I have seldom known any tendency to syncope recur. The generality of patients have lost from thirty to forty ounces of blood at the first bleeding, many from fifty to sixty, and some have borne with advantage the loss of from sixty to seventy ounces. It is true that many patients, from age, constitution, or other circumstance, cannot bear such copious depletion; but these are comparatively few, and the generality of cases admitted into this hospital, though with broken-down constitutions, bear with ease and advantage full (and, if necessary, repeated) bleeding. The advice of various authors to bleed until the buffy coat disappears, must be taken with a few grains of allowance; yet its presence or absence is by no means to be neglected. Many circumstances in blood-letting, it is true, may prevent the formation of the buffy coat in blood otherwise disposed to it, so that we cannot conclude against the presence of inflammation from its absence; but, in almost all cases in which the blood does exhibit this appearance, joined with other symptoms, we may with tolerable certainty infer the existence of inflammatory action. A frequent pulse is by no means an invariable symptom of pneumonic inflammation; for several severe cases occurred where it was scarcely at all accelerated. A slow pulse ought not, therefore, to deter us from employing the same active means as we would do in cases where it is frequent. Blisters and digitalis are no doubt useful occasionally, when large bleedings are contra-indicated; but, in general, I have little faith in them. The most useful auxiliary to blood-letting, in diminishing the action of the heart and arteries, is the tartarized antimony, given in nauseating doses. The objections against its use in fevers do not apply here, as the stomach is seldom in an irritable state in pneumonia; and I can say, from experience, that, with a little attention to regulating the dose, its effects will be highly beneficial. In protracted cases, where symptoms of effusion had taken place, a combination of squills, digitalis, and calomel, was generally and successfully employed.

Case I.—Edward Dougherty, ætat. twenty-five, (admitted into the hospital, January 3,) complains of acute pain in the left side of the thorax, much aggravated by a full inspiration; breathing much oppressed, with a dry troublesome cough; pulse 110, full; tongue furred; skin hot; thirst very urgent. Has alternate rigors and accessions of heat; was attacked with these symptoms ten days ago.—Mittatur sanguis ad deliquium detrahendo ℥lviii. et admoveatur Emplast. Lyttæ parti affectæ; necnon habeat ʒvj. magnesiæ. sulph.

4th.—Pain and difficulty of breathing much alleviated; cough abated in frequency; pulse 108, softer; tongue white; thirst urgent.—Rept. haustus cathart.

5th.—Pain of chest gone; breathing performed with perfect freedom; pulse 96. Appetite returning.

This patient was transferred to the convalescent hospital on the 10th, free from all complaint.

Case II.—Joseph Morgan, ætat. fifty-one, (admitted into the hospital January 21,) complains of acute pain in the chest beneath the sternum, difficulty of breathing, and severe dry cough. Pulse 102, hard; tongue white. The above symptoms have been present nine days. Has been twenty-eight years in India, during which time he enjoyed an uninterrupted state of good health.—Detrahatur sanguis e brachio ad ℥xlv. et admoveatur emplast. Lyttæ parti dolenti. Capeat statim ℥ss. magnesiæ sulphatis in infusi sennæ, ℥ij. solutæ.

22d.—Pain of chest gone; breathing performed with freedom; cough less urgent; pulse 92, soft; bowels open.

This patient had cough for some days after. He was transferred to the convalescent hospital on the 5th of February, free from complaint.

Case III.—Donald Mohagan, ætat. twenty-three, (admitted Feb. 1st.) labours under acute pain in the left side of the thorax, difficulty of breathing, and frequent cough, with scanty expectoration. Pulse 110, and hard; tongue furred. These symptoms came on five days ago; but he has been affected with cough and hurried respiration, on using exercise, for about a year.—Detrahatur sanguis e brachio ad ℥xlvj. et capeat ℥j. magnesiæ sulphatis ex aquæ cyatho.

Vespere.—Pain continues in the left side; breathing much impeded; pulse 108; bowels open.—Rep. detractio sanguinis ad ℥xxx. et admoveatur emplast. Lyttæ parti dolenti.

2d. Pain of side removed; breathing performed with more freedom; pulse 102, and soft; cough continues. —℞. antimon. tartar. gr. ij.; liq. ammon. acet. ℥iij.; infusi lini, ℥v. M. Capeat cochleare omni hora.

3d.—Cough was very urgent last night, and produced considerable pain of the head. Pulse 98, full and hard; bowels open; breathing impeded.—Rep. detractio sanguinis ad ℥xxx.

He was considerably relieved by the bleeding, and he continued to mend during two days, at the expiration of which the cough and dyspnœa became urgent, attended with frequent hard pulse. In consequence of this he was again bled to ℥xxx. by which the symptoms were considerably relieved; he, however, continued to be affected with cough and dyspnœa, on using exercise, for several months afterwards.

It will be seen that this patient lost 136 ounces of blood in five days; seventy-six ounces having been abstracted during the first day.—We could adduce more cases in which depletion was carried to the like extent, but this one may suffice as an illustration of the extent to which the depletory system may be carried.

Case IV.—James Taylor, ætat. thirty-five, (admitted into the hospital, February 11th,) complains of acute pain about the middle of the sternum, difficulty of breathing, and alternate rigors and accessions of heat; urgent thirst; and frequent severe cough, with scanty expectoration. Pulse 110, full and hard; tongue furred. He has had cough for more than a fortnight, but the above acute symptoms came on three days ago.—Detrahatur sanguis e brachio ad ℥liij. et capiat ℥j. sulphatis magnesiæ, nec non admoveatur emplast. Lyttæ sterno.

12th.—Pain gone; breathing performed with freedom; pulse 100, and soft: cough continues. Bowels freely opened.

The cough continued some days, when it entirely left him; and he was discharged on the 24th, free from complaint.

ENGLISH OPIUM.

Messrs. Cowley and Staines, of Winslow, Bucks, have cultivated poppies for opium with such success, as to induce the belief that that branch of agriculture is of national importance, and worthy of support. In the year 1821, they produced 60 lbs of solid opium, equal to the best Turkey opium, from rather less than four acres and a half of ground. The seed was sown in February, came up in March, and, after proper hoeing, setting out, &c. the opium gathering commenced at the latter end of July. The criterion for gathering the opium was, when the poppies, having lost their petals, were covered with a bluish-white bloom. The scarificator, an instrument containing five small blades, was then applied to them, horizontal incisions being preferred, because the juice was not so apt to

run from them before inspissation. After being scarified in one aspect, the head was left until the juice was coagulated (about two hours,) it was then removed by gatherers, and fresh incisions made on other parts. The poppies were found to produce opium freely, until the third or fourth incision, and some of them even to the tenth. Opium was gathered daily until, at the rate of 30s. per lb. the produce would no longer bear the expence; 97lb., 1 oz. were procured at an expence of 31l. 11s. 2½d., and this, when evaporated sufficiently in the sun, produced above 60 lb. of properly dried opium.

The poppies stood on the stalks until they began to turn yellow (Aug. 18,) they were then pulled and laid in rows on the land, and, when sufficiently dry, the heads were gathered, thrashed, and the seed separated by coarse riddles, and cleaned by fine sieves and a fan. The seed amounted to 13 cwt. and was expected to produce 71½ gallons of oil. The oil-cake was given to pigs with great advantage, and also to stall-feeding cattle. An extract may also be made, by cold infusion, from the capsule of the poppy, eight grains of which are equal to one of opium; an acre produces 80 lb. of it. The poppy straw when well trodden in the yard, and laid in a compact head to ferment, makes excellent manure.

The quantity of opium consumed in this country is supposed to amount annually to about 50,000 lb. exclusive of exportations. This quantity (say Messrs. Cowley and Staines), our experiments have convinced us, could be easily raised in many parts of Great Britain, where good dry land and a superfluous population exist together. On the moderate calculation of 10lbs. per acre, that quantity would only require 4 or 5000 acres of land, and from 40 to 50,000 people. The employment would be given to such persons as are not calculated for common agricultural labour, and at a time when labour is wanted, namely, between hay-time and harvest.—*(Trans. Soc. Arts,* xl. 9.)

MELANGE.

British Indigo.—A discovery has been recently made, which promises the most important consequences in a commercial and agricultural point of view. About two years ago, 280 acres of land near Flint, in Wales, were planted with the common holly-hock, or rose-mallow, with the view of converting it into hemp or flax. In the process of manufacture it was discovered that this plant yields a beautiful blue dye, equal in beauty and permanence to the best indigo. —*(New Monthly Mag.* ix. 22.)

We should be glad to have this confirmed.

Preservation of Grain, &c. from Mice.—Mr. Macdonald, of Scalpa, in the Hebrides, having some years ago suffered considerably by mice; put at the bottom, near the centre, and at the top of each stack, or mow, as it was raised, three or four stalks of wild mint, with the leaves on, gathered near a brook, in a neighbouring field, and never after had any of his grain consumed. He then tried the same experiment with his cheese and other articles kept in store, and often injured by mice; and with equal effect, by laying a few leaves, green or dry, on the article to be preserved,—*(Phil Mag.)*

Preservation of Turnips. — Messrs. Staines and Cowley preserves turnips during the winter for cattle-feeding, by cutting off the tops, taking especial care not to injure the crowns, and then piling them up methodically on straw into a heap, covered exteriorly with straw. In this way they were found to keep in a perfectly sound state during the winter, and to be excellent food for cattle.—*(Trans. Soc. Arts.* xl. 29.)

Yeast.—The following methods of making yeast for bread are easy and

expeditious. Boil one pound of good flour, a quarter of a pound of brown sugar, a little salt, in two gallons of water for an hour; when milk-warm, bottle it and cork it close; it will be fit for use in 24 hours. One pint of it will make 18lb. of bread.—To a pound of mashed potatoes (mealy ones are best) add two ounces of brown sugar and two spoonfuls of common yeast, the potatoes first to be pulped through a cullender, and mixed with warm water to a proper consistence. A pound of potatoes will make a quart of good yeast. Keep it moderately warm while fermenting. This recipe is in substance from Dr. Hunter, who observes that yeast so made will keep well. No sugar is used by bakers when adding the pulp of potatoes to their rising.

Prevention of Dry Rot.—From an observation of the power of perfumes in preventing mouldiness, Dr. Mac Culloch was led to make some trials on wood, with a view to the prevention of dry rot. The results were favorable, but Dr. M., not having power to resume the experiments, recommends them to other persons. A cheap odorous oil is the substance required.

Paste.—Dr. Mac Culloch, in a paper on the power of perfumes in preventing mouldiness, gives the following directions for the preparation of a paste, which, as it will keep any length of time, and is always ready for use, may be of great service to mineralogists and others. "That which I have long used in this manner is made of flour in the usual way, but rather thick, with a proportion of brown sugar, and a small quantity of corrosive sublimate. The use of the sugar is to keep it flexible, so as to prevent its scaling off from smooth surfaces; and, that of the corrosive sublimate, independently of preserving it from insects, is an effectual check against its fermentation. This salt, however, does not prevent the formation of mouldiness; but, as a drop or two of the essential oils above-mentioned, (lavender, peppermint, anise, bergamot, &c.,) is a complete security against this, all the causes of destruction are effectually guarded against. Paste made in this manner and exposed to the air, dried without change to a state resembling horn, so that it may at any time be wetted again, and applied to use. When kept in a close covered pot, it may be preserved in a state for use at all times."—(*Edin. Jour.* viii. 35.)

New Form of the Voltaic Apparatus.—Mr. Pepys has constructed, at the London Institution, a single coil of copper and zinc plate, consisting of two sheets of the metals, each fifty feet long by two feet broad, having therefore a surface of 200 square feet; they are wound round a wooden centre, and kept apart by pieces of hair-line, interposed at intervals between the plates. This voltaic coil is suspended by a rope, and counterpoise over a tub of dilute acid, into which it is plunged when used.

It gives not the slightest electrical indications to the electrometer; indeed its electricity is of such low intensity that well burned charcoal acts as an insulator to it; nor does the quantity of electricity appear considerable, for it with difficulty ignites one inch of platinum wire of 1-30 inch diameter. When, however, the poles are connected by a copper wire 1-8 inch diameter and 8 inches long, it becomes hot, and is rendered most powerfully magnetic, and the instrument is admirably adapted for all electro-magnetic experiments. Dr. Wollaston's well known and curious arrangement of a single pair of plates, may justly be called a *Calorimotor;* and to Mr. Pepys's coil we may apply the term *Magnetomotor.*

Test of the Dryness of Air or Gases.—M. Serullas recommends the alloy of bismuth and potassium, ob-

tained by heating together 60 parts carbonized cream of tartar, 120 of bismuth, and 1 of nitre, for two hours, as an excellent test of the dryness of gas in certain circumstances. A small fragment of the alloy is to be introduced into the gas over mercury, and the least moisture in it will tarnish the metal immediately. The alloy is so rich in potassium, that the smallest fragment, when cut with scissars, scintillates. If a piece be bruised, it burns, leaving a green oxide.

Hydraulic Instrument for raising Water.—It is well known that if a glass vessel containing water be placed in the centre of a whirling table, the water, by the centrifugal force, will be thrown from the centre outwardly, and the surface of the water will assume a form approaching to that of a parabola.

Dr. Crelle, architect to the King of Prussia, has accordingly made the bent tube in his model of the improved Hessian machine of a parabolic shape, and on being placed in a certain depth of water, the water entering below at a hole in the centre of the tube, is by the quick whirling movement given to the machine, raised and delivered at the upper ends of the tube into the circular troughs, and runs out from thence at a spout on one side of it. Many tubes may be thus combined, and the quantity of water raised be increased accordingly. The value of this machine on a large scale is not known, but certainly this is the best form of it.—(*Tech. Rep.* iii. 99.)

ASTRONOMICAL SOCIETY.

April 11.—A letter was read from M. Pastorff to the late President, on a Photosphere observed at Buckholts, in Germany, round Venus, Jupiter, and Saturn.

At the same meeting was read, an Extract of a Letter from M. Littrow, Director of the Imperial Observatory at Vienna, to the Foreign Secretary, relative to the Cause of certain Discrepancies in Astronomical Observations; on the Construction of Instruments, and on Correction for Refraction.

MARRIED.

Mr. James Morss Churchill, Fellow of the Royal College of Surgeons, Princes Street, Leicester Square, son of the Rev. James Churchill, Thames Ditton, to Susannah, youngest daughter of the late Mr. Hendrick Agnis, of East Mersea.

DIED.

On Friday, the 25th inst. in the 60th year of his age, John Gibbs Ridout, M.D. F.L.S. of the Crescent, New Bridge Street.

Mr. Hyde, Surgeon, of Lambeth.

TO CORRESPONDENTS.

Our Manchester Correspondent L—— will find his propositions fully answered in our succeeding numbers.

Communications are received from X.X.P.C. D.D. *all of which will be appreciated in their turn.*

We beg leave to assure L. S. that no such communication as the one alluded to in his letter, of the 24th ultimo, has, as yet, reached us. Probably it may be found at the Post Office, where many others addressed to us may be lying, in consequence of the postage not being paid.

W. B. *may depend on receiving the 1st and 2nd Parts of the Medico-Chirurgical and Philosophical Magazine, through the channel pointed out, as well as Number 13 and 15 of Part 3, which, when completed, will be done up in the same ornamental wrapper, as the two preceding, each containing 6 Numbers, without any additional charge.*

In reply to G. M. we refer him to the notices in our preceding publication.

Select extracts from Dr. GALL's *Lectures and Works will be continued.*

[In page 254 of our preceding Number, line 20 from the bottom, of 2d column, should read as follows—"at its upper part it had a thin and ecchymosed appearance, the carotid was examined, &c."]

London:

Printed by E. JUSTINS, 41, *Brick Lane, Spitalfields.*

Published by COX and SON, St. Thomas's Street, and 39, High Street, Southwark. Sold also by Sherwood, Neely, and Jones, Paternoster Row; Simpkin and Marshall, Stationers' Court; Callow and Wilson, Princes' Street, Soho; John Cox, Berner's Street, Oxford Street; E. Willson, Corner of Royal Exchange; Chappel, Cornhill; W. Turner, Cheapside; T. Boys, Ludgate Hill; H. and W. Smith, 192, Strand; G. Roake, 31, Strand; W. Sams, St. James' Street; W. Stewart, South Bridge Street, Edinburgh; Hodges and M'Arthur, Dublin; &c. &c.

THE WEEKLY

MEDICO-CHIRURGICAL & PHILOSOPHICAL MAGAZINE.

No. XVIII.] SATURDAY, JUNE 7, 1823. [*Price 4d.*

" FLORIFERIS, UT APES, IN SALTIBUS OMNIA LIBANT
OMNIA NOS, ITIDEM, DEPASCIMUR AUREA DICTA."

DR. GALL'S LECTURES,

(Continued from page 262.)

ON MATERIALISM.

With those unacquainted with Dr. Gall and his doctrine, the idea of materialism is always uppermost —his notions, therefore, on this subject, may not prove uninteresting to our general readers, the substance of which is as follows.

" By the word materialism," says Dr. Gall, " things entirely different are designated. The materialist sometimes pretends that there is no other existence than that of matter, and that all the phenomena of the world are simply the effect of matter. The old church called those materialists, who taught that matter existed from all eternity, and, consequently, that God did not make the world of nothing. This kind of materialism leads commonly to the denial of the existence of a supreme intelligence, of a God,—and then it is confounded with atheism. It is not with this kind of materialism that my doctrine is accused. If any one can become an atheist, it is not he who occupies himself at large with the study of nature, for at every moment he meets with phenomena which he cannot explain by any of the known laws of the material world. He perceives not only the incomprehensible wonders of particular organizations, but also the wise concatenation of the whole taken together. Nothing in the universe is isolated; all the worlds have been placed in a reciprocal co-relation; inanimate with living nature; all living beings with each other. Who then can misconceive one cause from all the causes, one supreme law from all the laws, one intelligence from every intelligence, one who ordains every thing; in a word, God?

Another kind of materialism is professed, when it is maintained that man is not composed of two essentially different substances, that is, with a soul and a body; that all the phenomena commonly attributed to the soul, are only the result of the combination and form of the matter; or that the soul is only a fluid of extreme tenuity diffused throughout the body, and that it has given to each part its proper life. This second kind of materialism includes a doctrine not less erroneous than the first, and likewise destroys the belief of the immortality of the soul. Its partisans, nevertheless, wish to make it appear, that this consequence is not established. " The principles of matter, say they, are, in their nature, as eternal and imperishable as the spiritual substance; those two substances cannot be annihilated but by the express command of God, consequently there would be nothing either absurd or dangerous in thinking that the immortal soul may be immaterial; we ought, on the contrary, to admire more the Creator who could unite so many qualities to matter, and raise it to the faculty of thinking and willing. If it be wished, continue these philosophers, to consider the soul and the body as two substances totally different, the action of the one over the other is no more understood, than the manner in which thought can be communicated to a material element; and because this last point is above our comprehension, it does not follow

that the one is more consistent with truth than the other. That is also, say they again, the reason why thought has been so long considered as a property of matter; and those even who teach the resurrection of the body, are equally convinced of the immortality of matter. Lastly, add they, but a very deficient notion of matter can be acquired, and one but purely negative of the soul, that is, let one represent to himself a substance from which all the known faculties of matter have been abstracted, and to which the faculty of thinking and willing is left; reason nevertheless can no more reach the essence of the matter, than that of the mind; consequently it cannot be reasonably maintained, that extent and other properties are incompatible with the essence of the soul, nor that the faculty of thinking is incompatible with the essence of the body."

My doctrine, continues Dr. Gall, has nothing in common with this hypothesis, nor consequently with this kind of materialism. I have always declared that I do not investigate the nature of the soul and body, and that I will not explain the essence of any of their faculties. I confine myself entirely to phenomena. Now, we see, that in this world, no faculty is manifested without a material condition; all the faculties, even those called spiritual, act only by means of matter, and their action can only be perceived by means of material organs. If people will call me a materialist because I say that all dispositions are innate, and that their exercise depends upon material organs, it should be proved, when speaking in this manner, that I acknowledge no other substance but that of matter, and that I reject every other faculty. The following observation will prove how far this consequence is unjust.

I call *organ* the material condition which renders the manifestation of a faculty possible. The muscles and the bones are the material conditions of motion, but they are not the faculty that causes motion; the ensemble of the organization of the eye, is the material condition of the sight, but it is not the faculty of seeing. I call *organ of the soul* a material condition which renders possible the manifestation of a moral quality or an intellectual faculty. I say that man, in this life, thinks and wills by means of the brain; but if it be inferred from this that the willing and thinking being is the brain, or that the brain is the thinking or willing being, it would amount to the same thing were it to be said the muscles are the faculty of motion; that the organ of sight and the faculty of seeing are the same thing. In both cases, the faculty is confounded with the organs, and the organs with the faculty.

This error is the more unpardonable as it has been very frequently committed and rectified. St. Thomas answered in the following manner those who confounded the faculty and the instrument, "although the mind is not a corporeal faculty, the functions of the mind, such as memory, thought, and imagination, cannot take place without the aid of material organs. This is the reason when the organs, by whatever derangement, cannot exercise their activity, the functions of the mind are likewise deranged, and this is what takes place in phrenzy, asphixia, &c. Again it is on this account that for a happy organization of the body there always results distinguished intellectual faculties." In the fourth century, St. Gregory of Nysse, compared the human body to an instrument of music. "It happens, says he, to several very skilful musicians that they cannot give a proof of their talents, because their instrument is out of order. It is the same with the functions of the soul, which can only be conveniently exercised when the organs of these functions are conformable to the

order of nature. But these functions cease or stop when the organs cannot serve for their motion; *for one thing peculiar to the mind is not being able conveniently to exercise its faculties but through the medium of sound organs.*" In another passage, he says, "the soul and body begin to exist at the same time; that it is present although it does not manifest itself; in the same manner as the future man is contained in the semen; that the soul cannot make itself known until the successive developement of the corporeal organs permits it."

If the difference that exists between the organs and the faculties be not taken into consideration, and that, to be a materialist, it is sufficient to declare that the exercise of the intellectual faculties depends upon organization, where will there be found, either an ancient or a modern writer whom we shall not have to tax with materialism?

Either the whole body is admitted as the instrument of the moral and intellectual forces, or, it is said that the brain is this instrument, or, lastly, several distinct instruments are adopted in the brain. It is upon those three propositions that all opinions are connected. Now, it is evident that the result of each of these propositions is to make the intellectual faculties and moral qualities depend upon material conditions. In the first case, it is the body that is admitted as a necessary condition for the exercise of the faculties of the soul. If materialism consisted in that, it is God himself who would be the cause of our error. Is it not God, says Boerrhaave, who has so intimately connected the soul with the body, that its faculties are defective when the organization is defective, and that they are troubled when the body is sick? Saturnin derives the difference of the moral and intellectual qualities of man, from the different structure of his organs. All the ancient moralists, Solomon, St. Paul, (1 Epist. to the Corinth. c. xiii. v. 11.) St. Cyprian, St. Augustine, St. Ambrose, St. Crysostome, Eusebius, &c. all consider the body as the instrument of the soul, and loudly profess that the soul is always regulated after the state of the body. Philosophers also, with Herder, admit that all the faculties, even thought, depend upon organization and health; and, that if man is the most accomplished being of the terrestrial creation, it is because the most perfect organic faculties we are acquainted with, act in him by means of the most perfect instruments of organization, to which these faculties are inherent. Lavater accuses every one who, on this subject, concedes nothing to primitive organization and formation, with insulting reason, and with defending a contradictory system in every living being. In short, from the time of Hippocrates and Galen, physicians and physiologists have all established the same doctrine; and whatever diversity there may be in their opinions, the principle is always the same. Some make the moral character to depend upon the organs of automatic life; others seek for the principle of the passions in the numerous nervous plexuses and ganglions of the chest and abdomen. Others explain thoughts and desires by causing them to be derived from the liver, loins, and stomach; others seek for the cause of them, in some disposition or other of the vessels, or in the mixture of the fluids. But it is very evident that all alike submit the faculties of the soul to material conditions; and, consequently, if this language was sufficient to accuse me of materialism, all the physicians, philosophers, and the fathers of the church, must in like manner, be accused with it.

Is it wished that the accusation of materialism should be reserved solely for those who more particularly consider the brain as the organ of the soul? this doctrine is no less diffused

than the one we allude to. It is already found among the pythagoreans.—The physician-physiologists and philosophers make every thing to depend upon the brain, at least the qualities of the mind, attention, memory, imagination, &c. Boerrhaave and Van Swieten attribute not only ideas, their combination and judgment to the brain, but also the moral character of man and all his human essence. Some among them go so far as to pretend that received impressions leave traces in the brain; by these traces they explain the memory, the comparison of ideas and judgment. Others, with Malebranche, attribute the difference of faculties and inclinations to the firmness or softness, to the dryness or humidity of the cerebral fibres. Haller, Buffon and Bichat consider the inequality of the two cerebral hemispheres as the cause of mental alienation. These are so many opinions which would infallibly lead to materialism.

There is no one, not even excepting my adversaries, who is not forced either to admit the brain as the organ of the soul, or to suppose a very subtle material intermediary substance between the soul and the body. Professors Ackermann, at Heidelberg, and Walter, at Berlin, are exactly in this position, and their objections have been repeated by the greater number of my antagonists. The first does not confine himself to regarding the brain as the organ of the soul; he even admits an extremely subtile nervous marrow, soft and almost fluid, which is gradually converted into an animal vapour in the cavities of the brain, and which becomes the intermediary agent between the soul and the nerves of the senses. Walter says, "In the infant the brain is like pap—in old age hard—and in the middle age, of a consistence between the two. The brain should possess a certain degree of firmness and elasticity, in order that the soul may be enabled to display itself in its greatest lustre, and that it may attain its greatest spiritual perfection. This manner of viewing things does not lead to materialism, its object is only a reciprocal union between the soul and body." Thus there is no writer who does not make moral and intellectual functions depend upon material conditions; and my adversaries, if I were a materialist, would be no less so than myself. In short, do my opponents think themselves able to impute materialism to me, because instead of only one organ of the soul, I admit several? But is a man more or less a materialist according as one or more organs is admitted?—Because the organ is of a piece, is it immaterial? Whether the whole body or the whole of the brain be the only organ of the soul, the body and the brain belong to matter. The admission of several organs in the brain makes no difference in this respect. The hand is not less material than the five fingers. It appears my adversaries have perceived the little solidity of their consequences; for, to save, at least in appearance, the simplicity of their organ of the soul, they have been obliged to imagine a central point where the soul should have its seat, and where it should perceive all external and internal impressions. "Organism, says professor Ackermann, although divisible into several organs, offers, nevertheless, a complete whole, in which all the organs proceed from a point, and where it is necessary they should all unite." But, unfortunately, he is forced to agree that the anatomy of the brain does not afford this principal point where are united all the nerves of the senses, which transmit sensations to the organ of the soul. I have on the contrary proved, in the anatomy of the brain, that its different parts take their origin from different points, and expand in large nervous beds in places equally different. Van Swieten and Tiedemann have already remarked, that one point

of general union, when impressions of every kind should arrive at the same time, would only produce confusion. Professor Ackermann nevertheless thinks that a similar union of all the divergent nerves might be very possible by means of an intermediary substance into which they might terminate; and as, according to his opinion, that might be, he peremptorily concludes that it actually is so. But what would be the use of this union? That very subtle intermediary substance must occupy a space at least as considerable as that of all the divergent nerves, for otherwise it could not be in contact with them; and even were this point as small as an atom, would it be less material on that account?

Suppose that plurality of organs does not exist in the manner I have demonstrated them; every one who has considered the whole body, or the brain alone, as the organ of the soul, have equally admitted with myself more than one organ of the soul. In fact it is certain, and all anatomists agree on the subject, that the ensemble of animal life, consequently the brain, is double. This organ is composed of two hemispheres, each of which includes the same parts. Therefore all of us have a double organ of the soul, and we should all be materialists, did it suffice to be so, to believe in the plurality of organs; and God himself, in the most incontestable manner, would be the founder of materialism. If I am a materialist because I do not admit one single faculty of the soul, and because I acknowledge several primitive faculties, I ask whether the ordinary division of the faculties of the soul into understanding, will, attention, memory, judgment, imagination, affections and passions, express but one primitive faculty? If it be said that all these faculties are only modifications of one and the same faculty, who will prevent me from advancing the same thing in support of the faculties which I admit? It is very evident that we remark different properties of the mind and soul in man. Either then the soul must be composed of different faculties, or that one and the same soul produces different phenomena by means of different organs. Now, it is infinitely more easy to figure to oneself the unity of the soul in the last case than in the first; consequently, materialism is no longer a bugbear that ought to keep people aloof from my doctrine than from that of others. Analogy comes again in support of this last proposition. Every one acknowledges that several functions entirely different, which people think themselves obliged to attribute to the soul, only take place through the means of different organs. Voluntary motion, for instance, is performed by means of the nerves of the vertebral column; the functions of the senses are each attached to a different internal and external apparatus.

It is true that the comparison of voluntary motion, and the functions with the moral and intellectual faculties, will not be admitted, because these first functions are considered as material. But as we are conscious of the manifestation of these functions, part of which depend on the will, it is for that reason advanced, that organs purely material have consciousness and will. This doctrine, by this means, would be much more closely connected with materialism than mine. After the example of a great number of philosophers we should be forced to qualify, material properties, memory, intelligence, imagination, affections and passions, propensities and inclinations. Who then could prevent these materialists from advancing another step, and granting the other faculties, reason and will, to matter, which in preference are called faculties of the soul and mind?

It is quite another thing after viewing the subject, and my doctrine gives rise to none of these objections. According to me, there exists but one and the same principle, which sees, smells, tastes, understands and feels, thinks and wills. But in order that this principle may acquire the consciousness of light and sound, that it may smell, taste, and feel, and that it may be capable of manifesting its different thoughts and propensities, it stands in need of different material instruments, without which the exercise of all these faculties would be rendered impossible.

There results then from this discussion, that those who accuse me of materialism, because I consider material conditions as indispensable for the exercise of the faculties of the soul, confound those faculties with the instruments by means of which they act; also, that the brain being double, anatomists are forced to admit the plurality of these material conditions; and lastly, that, in all times, the most profound writers have submitted the exercise of the faculties of the soul and mind to material organs; consequently, if this truth established materialism, every physician and philosopher, not even excepting the fathers of the church and the apostles themselves, but must all be accused of materialism.

DR. GALL ON INFANTICIDE.

Infanticide awakens the idea of an atrocious barbarity, because it is supposed that the natural sentiment of maternal affection ought to revolt at the thought of it. Nature, it is true, has placed in the greater number of women, and the females of animals, this beneficent propensity. But in woman as in the females of the brute creation, this propensity is not of equal energy in all individuals. Many domestic animals abandon, kill or devour their young; many cows will not suffer themselves to be suckled by their calves—others, on the contrary, if they are separated from them, coutinue to call them by bellowing, and refuse to eat for several days. The same differences, unfortunately, in maternal love are also remarked among women. All are not desirous of being mothers; several are afraid of having chiidren. There are even some who consider their state of pregnancy as the height of misfortune. It is daily observed, that some women are remarkably fond of children, whilst others cannot abide them: and it must be obvious to every one, that there are women who cannot bear the idea of having their children near them. Observe also attentively the effect produced upon different mothers by the death of a child. Several, although delivered from shame, misery, and a thousand inconveniences, by the death of an illegitimate child, for a length of time afterwards shed tears at the remembrance of it. Other mothers, on the contrary, who are exposed to none of these inconveniences, see their lawful offspring buried with a smile on their lips. If there are women then in whom the sentiment of maternal love is but very feeble, it cannot be said, with respect to them, that infanticide is a crime more against nature and more criminal than any other premeditated murder."

Dr. Gall observed that himself and Dr. Spurzheim examined the heads of twenty-nine women infanticides: twenty-five of them had the organ of maternal love but very feebly developed. It is not, it is true, this maternal organization that induces a mother to destroy her offspring; but the mother that is organized in this manner has an internal motive less than another not to commit this crime; and having to combat the impulsion of the unfortunate circumstances in which she may be placed, she will not offer so much resistance as she would have done, if her internal sentiments had revolted with energy at the idea of

such a barbarous action. Almost all laws against child-murder suppose the crime to be premeditated, whenever it is not committed in a paroxysm of rage or hatred; but is it true that there are only these two affections that are capable of excluding premeditation; let this be judged from some of the actions of our own sex. How often does a sentiment of honor, even a misplaced one, cause us to risk not only our own lives, but that of our equals! How many young, strong and spirited people have deprived themselves of life, because they had lost the object of their love! How often has disappointed ambition, or the loss of fortune thrown us into despair! And yet we are *par excellence* the strong part of the human species: we are never deprived of all support; our misfortunes are never incompatible with the possibility of better prospects, and more rarely still do they deprive us of the hope of taking to ourselves a companion and a consoler. How different is the position of an unfortunate woman bowed down with affliction! to the weakest faculties, women commonly unite a higher degree of sensibility; they are more easily surprized by tender affections and passions which carry them away with more violence. How many of them are seen who, even in the heyday of their life, lose the use of their reason from very trifling circumstances! From infancy the impression commences, and the sense of honour and shame is in women, exalted and rendered more acute; and we ask these creatures, sensible in the extreme, timorous, young and inexperienced, to be cool, calm and reflected, when they are overwhelmed with all that is frightful and discouraging! The inconvenience of pregnancy, the terrible and affrightful conflict of all the passions which torment them whilst it endures, increase the irritability of their soul, and drifts them from their intellectual faculties. The decisive moment at length arrives; abandoned, without consolation, tortured with pain, weakened by the loss of blood, and stupified with a confusion of the most frightful ideas, the unhappy mother annihilates with her own trembling hands the frail existence of her infant; neither, perhaps, does this act take place but during a paroxysm of that insanity with which the most fortunate mothers are sometimes attacked at the moment of delivery.

In a report of the council-general of the Paris hospitals, which includes a space of ten years, (1804 to 1814) it was remarked at the article relative to the insane, that the number of men received at the Salpétrière and the Bicêtre was 2154, and the women 2804. Among this number of insane persons, 658 were child-bed women, and its consequences, or those which preceded at more or less distant dates.

The following remarkable fact, related by M. Esquirol, proves that a woman may destroy her child in the delirium consequent on accouchement. " A woman from St. Cloud, who was put to bed, killed her child by stabbing it in 26 different places with a pair of scissars, wrapped it up in a piece of linen, and threw it down the necessary. As she was in the habit of going out early, and as, on the day of her accouchement, she was not seen, people went in and asked after her child: she knew not what to say. It was sought after and found in the necessary. Taken to Versailles, where she was to be tried, she would not suffer herself to be blindfolded on the road thither, to shelter herself from the outrages of her countrymen who followed the cart: she now and then asked, ' there will be no harm done to me, will there, for I have done nothing?' After they had reached Versailles, she refused to eat any thing during the two first days. When she was brought before the tribunal, she

admitted her crime, offered no motive in justification, and confessed that she was ignorant of what she had done. The very wise judges then pronounced her not guilty, the crime having been committed in a state of mental derangement. How many unfortunate creatures have been, and still are victims to the misguided zeal of public justice! How comes it that we, as men, are not able to appreciate so deplorable a condition; and in appreciating it, how does it happen that we do not establish extenuating gradations in a crime that may either be aggravated or excused by so many circumstances? Why are inconveniences apprehended from exacting satisfaction from a seducer? Do not, at least, let us be afraid of being indulgent and humane for feeble, fragile and deceived innocence! The unfortunate creature whose excess of misfortune and despair has troubled her mind and broken her heart, can excite a just pity. She does not always deserve to be punished with that rigour reserved by the laws for deliberate and premeditated crime."

To give some idea of the fatal concourse of disastrous circumstances that may lead a mother, otherwise endowed with the best qualities of her sex, to kill her child, Dr. Gall cites the following fact, from the Journal du Beau Monde,* on the subject of his visit to the prison of Torgau.

"Among a number of criminals detained in the prison of Torgau, that were brought before Dr. Gall, there was a female, between thirty and forty years of age presented to him; who, deaf to the prayers and intreaties of her child, about four years old, had drowned it in a river. Dr. Gall examined her head; he took the hand of M. Loder, a barrister of Halle, who happened to be present, and passed it over the sides and back part of her head, to enable him to make some remarks. The prisoner having been withdrawn, he explained to numbers who had accompanied him, that he had discovered a very uncommon thing in a case like the present, which was, that the prisoner had the organ of maternal love very much developed, that the organ of murder was very little so, and that above all she ought to possess a great facility of learning any thing by heart. The magistrates who were present then related the following remarkable circumstances, concerning the prisoner, to Dr. Gall:—

"The prisoner, born of poor parents, had received almost no education; having grown up, she went to service in the country, and had received the best characters from her different masters. Unfortunately she was seduced, became pregnant, and the being to whom she gave life, was the cause of her misery. She was discharged from the house in which she was servant at the time. She was refused to be admitted any where on account of her child; and, for a length of time, she knew not how either herself or the unfortunate creature whom she cherished with all the affection of a tender mother, and whose existence she was obliged to curse, should subsist. A poor villager and his wife at length took pity on her; they took the child home, and took care of it for three years. The mother got a place, and conducted herself exceedingly well. The child grew up, and afforded great satisfaction to his adopted father; whom he loved with the tenderness of a son, and by whom in his turn he was equally beloved. This was sufficient to rouse the slanderers of the village and cause them to spread the report that the kind-hearted villager was the author of the days of his adopted child, whose mother persisted in refusing to tell the name of the father. The brave man, conscious of his innocence, treated all these assertions

* Aug. 1, 1805, No. 92, Leipzig.

with contempt; this was not the case, however, with his wife. So many frequent and disagreeable bickerings took place on this account, that the villager for the sake of peace and quietness, returned the child to his unfortunate mother. In vain she implored her masters; she represented to them without avail that she had served them with exemplary assiduity and fidelity; she saw herself once more, on account of this child, discharged during the rudest season of the year. All the other rich peasants treated her with equal severity; she no longer met with any hospitable villager. She wandered about from place to place, selling her humble clothing to appease her own and her child's hunger, finding no where either place or assistance. The child pined away; overwhelmed in mind and debilitated in frame from hunger and pain, she invoked death for the unfortunate child and herself as the only remedy to the woes. During this struggle between maternal love for her poor child dying with hunger and cold, and an internal voice that told her loudly that the destruction of her offspring was the only means of saving it, despairing of the compassion of men, and in a moment of insanity, she seized the unhappy victim, collecting the remainder of her strength, and in the fear of seeing it die slowly from innanition, she carried it to an adjoining river; deaf to its prayers, she threw it into the waves, where it was not long ere it found an end to its miseries. Exhausted and staggering with weakness she fell into a swoon, and in this condition she was first discovered. She immediately accused herself with having caused her child to perish, and was arrested. During her detention, which was protracted to a year, whilst they were instructing her process, she observed the most regular conduct, evinced a sincere repentance for the crime of which she had been guilty, which to her nevertheless did not appear as a crime; she awaited her punishment with resignation. The clergyman who visited her from time to time, related that she had had no kind of instruction, that she had not the least notion of religion, but that she appeared to him very docile, attentive and mild. Those by whom she was superintended gave also an advantageous account of her. These different motives induced the regency to mitigate the judgment of the Court of Leipzig, which condemned the unfortunate woman to be beheaded. This punishment was commuted to imprisonment for life in a prison where she should not be treated with too much severity, and where the principles of religion should be instilled into her mind. She learnt to read with extraordinary application and facility, and imbibed every thing with promptitude that was pointed out to her; so that, independent of the task that was set her, and which she easily performed, she could recite correctly and without hesitation several hymns, the catechism and a number of chapters in the bible by heart. She is the best spoken of among all the prisoners."

In the prison at Celle, we examined another prisoner guilty of child-murder. We found in her the organ of maternal love equally well developed. M. Bergk has inserted the history of this one in his Recuiel de Causes Celebres. This unfortunate creature had also been led away by the most pressing necessity, to expose her child.

(To be continued.)

MEMOIR of the late Dr. GORDON.

(Continued from page 263.)

The foregoing questions, and some others which relate to the minute anatomy of this organ, and respecting which different statements have been given, we willingly leave to the future determination of those who, to the best opportunities, and greatest skill in dissection, bring to the investigation minds free from prejudice, and unshackled by preconceived notions. It is only by means of a most refined and elaborate anatomy that some of them can be truly decided; and supported as the

descriptions of Reil are by the actual experience of Dr. Gordon, we have little hesitation in anticipating their final triumph over the opinions of Spurzheim and Gall. As to the *hypotheses* of these anatomists, respecting the nature and office of the *grey* matter of the brain, and the doctrine of the origin and reinforcement of fibres thence arising—these are points which any one who chooses may believe, but which anatomy is incompetent to demonstrate; and which, therefore, all sober inquirers will do well to disregard, when studying the facts and appearances which present themselves in investigating the minute structure of the brain.

This very able and learned Essay procured for its author the thanks of several philosophers and anatomists, of whose approbation any man might justly be proud. An eminent anatomist of London tells him, that 'he deserves the thanks of all 'British anatomists, for having so com-'pletely settled the question about these 'vaunted anatomical discoveries;' and the opinion of the illustrious Cuvier, to whom Dr. Gordon transmitted a copy of this work, I shall beg to subjoin entire, since it adds at once to the interest of my narrative, and to the honor of my friend's memory.

'Monsieur,—J'espérais vous remercier 'beaucoup plutôt du présent interéssant 'que vous m'avez fait, mais je voulais vous 'lire auparavant, et je n'en ai pu trouver 'le tems que depuis peu de jours.

'Il est vrai que MM. Gall et Spurzheim 'ne distinguent pas toujours assez nette-'ment dans leurs ouvrages et dans leurs 'leçons ce qui est hypothétique, et ce qui 'repose sur des observations positives ; et 'que leurs observations, même quand elles 'sont exactes, ne sont pas toujours aussi 'neuves qu'ils le pensaient quand ils les 'ont faites. Leurs figures présentent quel-'quefois ce qu'ils ont cru, plutôt que ce 'qu'ils ont vu: mais les critiques nom-'breuses que l'on a faites de leur travail, 'serviront à le rectifier en lui laissant le 'mérite, qu'il a en effet, d'avoir appelé 'l'attention sur des rapports des parties 'du cerveau, que l'on avait presque nég-'ligés avant eux dans l'enseignement.

'Votre ouvrage, Monsieur, est le plus 'solide de ceux qui ont été dirigés contre 'eux : vous faites voir des erreurs maté-'rielles dans leurs planches, des négligen-'ces dans leurs descriptions, des oublis 'dans leurs citations, qui sont incontes-'tables. Je suis fort aise de trouver que 'vous pensez comme moi sur leur pré-'tendu déplisesment du cerveau, qui m'a 'toujours paru une pure illusion.

'Veuillez donc recevoir l'expression de 'ma reconnaisance, et celle de la haute 'considération avec laquelles je suis, Mon-sieur, Votre trés humble, et très obéis-'sant Serviteur, G. Cuvier.'

'*Au Jardin du Roi, á Paris le* 31 *Aoust*, 1817.

This work drew from Dr. Spurzheim a pamphlet designed as a reply, not to Dr. Gordon only, but to his other opponents in Britain. Of this pamphlet Dr. Gordon did not think it necessary to take any public notice; but he communicated to his class his opinion of it in the followihg terms, which I copy from notes found among his papers. 'Dr. Gall's colleague, 'before his departure from this place, 'published a pamphlet, which he wished 'to be understood as containing a reply to 'my Treatise; and if you have read the 'one, I hope you will read the other. As 'an answer to my Treatise, I cannot re-'gard it. It seems intended to be read 'only by those who have not perused my "Observations." It attributes to me opi-'nions respecting both the functions and 'the structure of the brain, which I have 'nowhere expressed, either in my lectures 'or books. My objections were directly 'and pointedly urged; and they ought to 'have been as directly replied to; but 'instead of this, the writer studiously 'evades them all. For these reasons, I do 'not regard this pamphlet as any reply to 'my "Observations." I must add, how-'ever,' continues Dr. Gordon, 'that this 'pamphlet contains a statement with re-'spect to a recent dissection of an hydro-'cephalous patient in the Royal Infirmary 'of this place, which has been directly 'contradicted, publicly and privately, to 'the author himself; but which is so ca-'lumnious to the Institution, and to the 'individuals concerned in that dissection, 'at the same time that it is so unfounded, 'that it does not increase the reliance I 'have been inclined to place on aver-'ments, as to matters of fact, coming 'from that quarter.'

(To be continued.)

HOSPITAL REPORTS.

ST. THOMAS'S, FRIDAY, MAY 29.

Operation for Poptitcal Aneurism. By Mr. Tyrell.

This patient, aged 50, by trade a taylor, had been affected with poptitcal aneurism 9 months, but of which he could furnish no previous history.

When admitted into this establishment the tumour was considerably inflamed, the leg much swollen from œdema.—The operation, as unavoidable, was immediately

resorted to, of tying the femoral artery, in the usual situation.

During the performance of this operation another aneurism was discovered on the same side between which and the former the ligature was applied. On the opposite limb there were also two more femoral aneurisms, in addition to these a tumour in the abdomen was likewise discovered, the character of which is doubtful.

Four days after the operation the limb assumed an alarming appearance, in consequence of some unfavorable circumstances under which the patient laboured at the time the operation was performed.

(Further particulars as they transpire.)

Account of Graefe's Ligature of the Arteria Innominata.

Professor Gräefe, of Berlin, tied the arteria innominata on the 5th of March, 1822, in a sailor, about thirty years of age, who was affected with an aneurism in the right subclavian artery. During the operation, the patient was put upon his back on a table, in such a manner, that his head was hanging down on one side of the table, and the arteria innominata drawn up a little above the manubrium of the sternum.—The Professor then made a longitudinal incision, near the anterior edge of the sterno-mastoid muscle, down to the sternum, exposed the carotid artery, and followed its course till where it unites with the subclavian artery, to form the trunk of the arteria innominata. This was effected with very little difficulty, and the arteria innominata became distinctly exposed to sight. By means of a needle, curved in a particular manner for that purpose, a ligature was then passed round the arteria innominata, and both ends of it tied together.

No alarming symptom ensued, and the ligature, which was considerably broad, came away about a fortnight after the operation, carrying out just that portion of the artery where the innominata is divided into the carotid and subclavian artery. Some time afterwards, however, a hemorrhage suddenly arose, which, though considerable, was soon stopped by the application of cold water and pressure. The patient then complained of pains in the tumor formed by the aneurism, in which fluctuation was distinctly to be felt; and this determined Dr. Gräefe to make an incision into the aneurismal sac. A considerable quantity of pus and grumous blood was thus evacuated; and matter continued to be discharged daily from this opening, whilst the other was filled with granulations, and went on exceedingly well. The patient, however, got into a state of fever, began to spit blood, and to throw up matter; and so he died on the sixty-eighth day after the operation had been performed.

On dissection, the lungs were found in a diseased state; and in the arteria innominata a clot had been formed, extending from its origin to where the ligature had been applied. By an injection made into the aorta, the arteries of the right arm and right side of the head were entirely filled; the circulation in these parts having been fully re-established by anastomosing branches.—*(Med. & Phy. Journal.)*

Case of Melanosis. Communicated by Sir Andrew Halliday, Physician to His Royal Highness the Duke of Clarence.

John Howston, ætatis 51, March 18th, complains of pain of the breast and both hypochondriac regions, increased on pressure, full inspiration, and coughing. The pain of the hypochondriac regions darts to his shoulder when he lies on his right side; pains severe also in lumbar region, and increased on pressure and when he moves in bed. Is much affected with cough when he lies on his left side. Expectoration difficult. Pulse 108. Sputum thick, and in small quantity. Tongue clean. Headach. Heat 101. Has some difficulty in passing his urine. Bowels very constipated. Was attacked about five weeks ago with pains of knees, which left him about a fortnight

after; and the above symptoms came on since that time, and have continued the same. He has taken some medicines, but without relief.—Statim sit venesectio ad ℥xvj.; capiat bolum ex submuriate hydrarg. c. jalapa, et cras mane sulphatis magnesiæ, ℥j.

19th.—Bled to ℥xvj. blood not sizy, with relief of pain and increase of weakness of pulse. He passed a bad night. Cough, difficulty of expectoration, and pain of the right side, continue. Three dejections from the cathartic. Pulse 92, natural. Heat 94.—Applicatur statim epispasticum lateri sinistro; inhalatio vapores aquæ.—℞ Misturæ mucilaginosæ, ℥viij. tincturæ opii camph. ℥ss. M. capiat ℥j. sæpies urgenti tusse.

20th.—A bad night from pain of the breast. Cough and expectoration better. Two dejections. Pulse 100, soft.—Repetatur mistura mucilaginosa cum tinctura opii.

21st.—A better night. Pains of the chest and of the loins better. Some dysuria, with which he has been affected since the commencement of his present symptoms. Pulse 100, full. Heat 100. One dejection.—Repetatur mistura mucilaginosa c. tinct. opii, et vespere si perstat dysuria; adhibeatur balneum tepidum.

22d.—Pains of chest and dysuria relieved by the bath. Cough the same. Expectoration difficult. Pulse 108, full. Heat 98. No dejection.—Repetatur mist. mucilag. c. tinctura opii ammoniati, et cras mane capiat catharticum cum bolo submur. hydr. c. jalapa.

23d.—A restless night. Cough more severe. Pains diminished. No effect from the cathartic. Pulse 100, full and sharp.—Statim capiat infusus sennæ, ℥iij, omni hora donec alvus plene dejecta fuerit.

24th.—Pulse 100. Heat 98. Cough diminished. Pain of side much better. Several dejections from cathartics of yesterday.—Repetatur mist. mucilag. c. opio.

25th.—Pain and cough diminished. Pulse 104, full.—Repetatur mist. mucilag.; capiat cras mane infusus sennæ, ℥iij, omni hora donec alvus soluta.

Eight o'clock, P. M.—Abdomen painful and tumid. No dejection for two days.—Capiat statim olei ricini, ℥j.

28th.—Three dejections from cathartics. Hæmorrhoidal affection. Abdomen still hard, tumid, and painful. Other symptoms diminished. Pulse 106. Heat 100.—Repetatur mist. mucilaginous cum tinctura opii ammon.

30th.—Pulmonary affection much diminished. Hæmorrhoidal swellings very painful. Constipation. Pulse 112. Heat 100.—Capiat cras mane olei ricini, ℥j.; applicantur tumoribus hæmorr. hirudines, x.

April 1st.—Hæmorrhoidal tumors much diminished. Catarrhal symptoms the same. Pulse 112. Heat 98½. Great debility. Two dejections.—Repetatur mistura mucilaginosa; habeat vini Hispaniæ albi, ℥iv. To have a small piece of beef-steak daily.

2d.—Last night no complaints, but of great weakness. Pulse very quick, 140. Heat 103. Died at 4 o'clock this morning.

Dissection.—April 4th.—When the body was laid out for inspection, there were observed several black spots on the skin, and when cut into they presented a dark medullary appearance. On examining the brain, some of these were found to penetrate the skull, so as to render it of a dark colour, but not to soften it. Several of these little black tumours were seen on the surface of the dura mater. There was considerable effusion under the arachnoid coat, but none in the ventricles. The brain was rather softer than natural.

When the integuments of the thorax were reflected, several of these

dark spots were seen protruding through the parietes, and some were attached to the cartilages of the ribs. On opening the thorax and abdomen, all the viscera were found to be perfectly *studded* with these little black tumours, varying in size from that of a pin's head to that of a chesnut. On cutting out the lungs and other viscera, the tumours were found to penetrate their substance. Those of the liver were the longest; some of these varied in colour, approaching to white. All of them had the same medullary texture.—*(Lon. Med. Rep.)*

Edinburgh, April 10, 1823.

Case of Rupture of the Œsophagus, with Perforations of the Stomach, supervening to an acute Disease of this Organ. By M. Bouillaud, *eleve interne, at the Hospital Cochin.*

Pierre Louis Parechant, aged twenty years, of a large form, but of a pale and nervous aspect, was received into the Hospital Cochin on the 8th of March, 1822. He had suffered, during the six previous weeks, from pain in the stomach, increased after a meal and during the night; had muscular feebleness, with tremblings; and, when a child, had been affected by a purulent discharge from the right ear. On his admission, he had been bedridden only four days, and at that time, presented the following symptoms: the tongue rather red, and very moist; loss of appetite; thirst; constipation; the region of the stomach hot and painful; pulse frequent and sharp; occasional rigors; sub-orbitar head ache; slight delirium through the night. *Sweetened gum water, thirty leeches on the epigastrium, lavements, antiphlogistic diet.*

The patient appeared relieved by this treatment: but, for the first time, vomited once spontaneously.—On the 9th of March, his pulse was full, frequent, and large. *Bled once from the arm.*—On the 10th, 11th, and 12th, the retchings continued. The pulse was still full, strong, and frequent.—13th. He trembled greatly in the morning, and on endeavoring to get up staggered, and was unable to sustain himself. He lost his speech, stammered a few unintelligible words; could not seize objects with his right hand; his face was pale; mouth drawn to the left side; pupils dilated, but mobile. *Bled from the arm, a purgative lavement.* —14th. Epistaxis: he could comprehend questions, but not answer them; was impatient, agitated, and tossed himself under the bed clothes. *Bled from the foot, blisters behind the ears.*—15th. The agitations alternated with faintings; sighed and moaned frequently; the pulsation of the heart was very strong; heat of skin.—17th. Squeezed my hand forcibly with that which was paralyzed; sighed profoundly.—18th. Total loss of recollection; countenance contracted; the pupil large; pulse 150; death at nine o'clock.

Dissection twenty-four hours after death. The limbs rigid. 1st, *Head.* Injection of the meninges; the lateral ventricles were distended with a great quantity of turbid serum, approaching a milky hue; the cerebral tissue rather soft. 2d, *Thorax.* Gas escaped on opening the left cavity of the chest, the corresponding lung being slightly pressed upwards; the cavity of the pleura contained about four ounces of a reddish-brown fluid; the pleura was injected, and covered with red spots. *The œsophagus, a little above the cardia,* and to the *left side,* presented a *perforation* of the size of the finger's nail; and a little higher a *rupture* an inch and a half in length, through which the liquid just described had escaped into the left cavity of the chest, and which was nothing else than part of that contained in the stomach, mixed with blood. The right side of the thorax presented nothing particular. 3d, *Abdomen.* On opening the abdominal parietes, some gas and a quantity of liquid matter contained in the

peritoneal cavity escaped. The stomach presented, in its splenic region, *four perforations*, disposed in such a manner as to form the four angles of a parallelogram; the largest of which was of the size of a *centime*, and the others were smaller and smaller. The mucous membrane was destroyed by ulceration to a much greater extent than the serous, which probably was torn by the retchings. The mucous membrane of the stomach was red and injected throughout. The portion of the peritoneum, in contact with the liquid effused through the perforations, was injected. The mucous membrane of the small intestines, of the cæcum, and colon, was also injected, but entire.—*Archives, Mai*, 1823.

Case of Rupture of the Stomach, supervening to a Cancerous Affection of this Organ, during the Efforts at Stool. By M. Bouilloud, *&c.*

Antoine Botte, aged sixty-one years, was received into the Hospital Cochin, on the 22d of February, 1822, with symptoms of a cancerous affection of the stomach, combined with pulmonary disease. The stethoscope gave the report of ulceration when applied at the top of both sides of the thorax. However, there was no symptom that announced immediate dissolution; when, seven days after the entrance of the patient into the hospital, I was called to him at one o'clock in the morning. He had got up in order to go to the night-stool, and after some fruitless attempts, he at once lost all recollection. I found him in the following state: countenance pale and inanimate; the eyes dull and obscure; pulse could not be felt; skin cold, and, with the countenance, covered with a cold sweat; respiration slow; no answer to questions; death shortly after.

Dissection.—Both the lungs were tuberculated, and excavated at their summits by large fistulous ulcers filled with tuberculated matter, and each was lined with two membranes, of which the deepest seated was red and adherent to the pulmonary tissue. On opening the abdomen, a great quantity of dirty, liquid, and muddy matter, escaped. The peritoneum presented a very red and punctuated appearance where it was in contact with the effused matters, which resembled that contained in the stomach. This organ presented, at its pyloric region, near the small curvature, a *perforation* about the size of a half-franc piece, of which the margins were regular and thickened, and divided at the expense of the mucous coat. This perforation embraced, at one extremity, a large ulceration of a parabolic form, circumscribed by a border projecting in the manner of a pad or roll. The bottom of this ulceration was formed by the pancreas, whose anterior surface adhered to the whole circumference of the projecting border just mentioned. The *perforation* was precisely in that situation where the pancreas terminated, and ceased to furnish the substituted paries to the disorganized portion of the stomach. The pyloric ring extended into the border which circumscribed the ulceration, and was white, pearly, and compact. On the rest of its internal surface the stomach presented several red patches, as if spotted with blood, which could not be removed by repeated washing. The pylorus was considerably contracted. Nothing particular was observed in the intestines or in the brain.—*Archives, Mai*, 1823.

Hæmorrhage from one of the Fallopian Tubes, speedily becoming fatal. By M. Godelle, M.D. *Soissons.*

A female, while suckling, became the subject of a violent paroxysm of anger, a few hours after which she was seized with severe colicky pains, accompanied with retchings and very

frequent stools. The abdomen soon afterwards became hard and tumid; the pains more violent; and cold perspirations, hiccup, syncope, and death, supervened within nine hours from the first attack of pain. The body had been interred; but owing to a report that the individual had been poisoned by her husband, exhumation was ordered, and the body inspected.

Dissection.—The head and thorax presented nothing remarkable. The abdomen, which was tumid, contained within its cavity more than eight pounds of blood, separated into clots of coagulum and a reddish serum, and situated chiefly in the hypogastrium, between the bladder and womb on the one side, and the small intestines on the other. The mucous membrane of the digestive tube was particularly examined from the mouth to the anus; it presented no marks of disease, excepting a slight redness at one point, in the small intestines, where two prune-stones were lodged. An oblong perforation, with irregular and torn-like margins, about an inch in circumference, was discovered in the texture of the right Fallopian tube: this opening was surrounded by a reddish areola, the rays of which extended about three lines from the margin of the perforation. The rest of the peritoneum was examined with the most scrupulous attention, and it did not appear that it could have permitted, at any other point, the escape of the smallest quantity of blood, not even by means of transudation, as it retained, throughout its extent, its natural character. The uterus possessed a blanched appearance, and was altogether exsanguineous: it contained about half an ounce of mucus, but not a drop of blood.—*Ibid. Mars*, 1823.

Case of Tumour of the Brain. By M. Dupareque.

A female, of a strong constitution, of an ardent temperament, and of strong passions, at the age of thirty-eight, and after a life of frequent change from the utmost distress to the greatest and most warmly felt pleasure, became suddenly sedentary, owing to the death of her husband. She was afterwards seized, in a manner more or less continued, with violent pain in the posterior and superior part of the head; occasionally accompanied with a state of coma from which she was frequently roused by violent spasmodic contractions of all the muscles of voluntary motion, attended with insupportable pain. At the age of forty, these symptoms had become much increased; she had lost her memory; and from a state of high delirium, had sunk to idiotcy. After a sudden and unexpected melioration of her symptoms, which, however, was of short duration, she became apoplectic, in which state she died on the second day.

Dissection.—Two ounces and a half of limpid serum were found in the left ventricle of the brain; an equal quantity, more turbid, and possessing a reddish colour, was in the right ventricle, the posterior part of which contained a body having the form and size of a pullet's egg, presenting a bluish-red colour, and apparently intimately connected with the plexus choroides, to which it adhered, as well as to other points of the cavity, by means of fine vascular filaments. The internal structure of the tumour had the closest analogy in appearance to a piece of hepatized lung.—*Nouv. Bibl. Méd. Jan.* 1823.

Case of Diabetes, treated with Carbonate of Ammonia. By Dr. Neumann, *of Berlin.*

A female, aged forty-eight years, of a feeble and hysterical constitution, suffered an attack of abdominal dropsy. This disease was soon after followed by an abundant secretion of urine, and a voracious appetite, with extreme emaciation. The diabetic state of the urine was demonstrated

both by its quantity, and by its saccharine properties. Carbonate of ammonia was prescribed, and continued for four months; its dose was increased from five grains thrice daily, to fifty grains in the day. The patient left the hospital perfectly cured.

MARRIED.

At St. James's, Piccadilly, Mathias Andrews, Esq. to Mary Frances, only daughter of Thomas Stokes Salmon, M.D. both of Reading, Berks.

On the 2nd Inst. at Great Malvern, by the Rev. ——— Caulfield, W. Norris, of Stourbridge, Esq. M.D. to Ann, youngest daughter of the late Capt. George Blake, R.N.

On Tuesday last, at Shiffnall, Salop, by the Rev. R. Smith, James Bucknall, Esq. Fellow of the Royal College of Surgeons, London, to Mary Charlotte, fifth daughter of Lewis Pingo, Esq. late of the Royal Mint.

A RESPECTABLE MEDICAL PRACTICE in Yorkshire, to be disposed of. Terms 600l. Particulars may be had by applying personally any forenoon at Cox and Son's, Medical Booksellers, St. Thomas's-street, Borough.

TO CORRESPONDENTS.

The Portrait of DR. GALL, *promised in this Number, is unavoidably postponed until this day week.*

M. P. *came to hand, and will be disposed of in the usual way.* D. D. *and* M. *are also received.*

We beg SCRUTATOR *to receive our acknowledgment for the information with which he has been pleased to favor us relative to the long-pending overtures of co-partnership, having been finally rejected by Dr. E—dy, proposed to this distinguished empiric by the no less notorious* Doctor *Re—ce,* " OF LONDON." *The latter, it appears, offered to supply the former with a monthly* quantum sufficit *of slang,* veritable, scurrilily, *and* BARE-FACED PUFF, *as an equivalent for want of* A DIPLOMA, *which considerations, he maintained, would at least save a great quantity of chalk, &c. E—dy, however, disclaimed against the insidious proposition — a proposition, he observed,* " *that struck at the root and branch of his well-earned popularity—a popularity which resounded from every* crib *and corner of the metropolis—a metropolis, forsooth, in which there was not a brick wall, not even excepting* BEDLAM *and the* OLD BAILEY, *that did not bear unblushing testimony of his celebrity—a celebrity, in fact, recorded throughout every country town and village, from John o'Groats' to the land's end, in letters of chalk. In fine, he, (Dr. E—dy) was better known, all over the British empire, by means of his* " marker" *than the* Doctor " OF LONDON," *in Piccadilly itself, notwithstanding the great* travelling fame *of* MUNCHAUSEN THE LITTLE, *alias* Yellow Back. *To be brief, the hero of* SOHO *preferred his own professional respectability* " *sui generis*" *in an honest homely way, to the more degrading prospect of* " *seeking the bubble reputation*" *through the* FOUL MOUTH-PIECE *of a greater, but not half so respectable* A HUMBUG *as himself; in spite of the almost irresistible temptation, of seeing a larger share of* brass *brought into the concern than* E—DY *himself could ever boast of possessing. The terms, nevertheless, would not suit.* PICCADILLY *edged off, in apparent* " *dudgeon,*" *ruminating* " *dire revenge*" *either on the ladies, or in the absence of better game, perhaps, on the* Doctor *himself, in the shape of some unhappy hit of* " *scandalum magnatum*" *to swell out his next month's rhapsodies. Be that as it may,* SOHO *took advantage of the truce, by giving a view hollo, at the sight of an old patient—in this manner, he left* PIC *behind him, repeating the following appropriate quotation from Horace, with more than ordinary emphasis, and in a tone of voice, at the same time, distinct enough for* JOANNA *to hear him:* '*ODI PROFANUM VULGUS ET ARCEO,*' &c. Pilula salutaria, una satis est prodosi!!! *Whether the last sentence was meant as a figurative kind of challenge, whether the* PICCADILLY HERO *will take advantage of it, by construing it into one; or, whether it was merely enunciated amid the enthusiasm of professional ardour, on the point of being imposed upon, a very short time may disclose.*

All Letters, &c. (post paid) addressed for the Editors, at the Publisher's, &c.

London:

Printed by E. JUSTINS, 41, *Brick Lane, Spitalfields.*

Published by COX and SON, St. Thomas's Street, and 39, High Street, Southwark. Sold also by Sherwood, Neely, and Jones, Paternoster Row; Simpkin and Marshall, Stationers' Court; Callow and Wilson, Princes' Street, Soho; John Cox, Berner's Street, Oxford Street; E. Willson, Corner of Royal Exchange; Chappel, Cornhill; W. Turner, Cheapside; T. Boys, Ludgate Hill; H. and W. Smith, 192, Strand; G. Roake, 31, Strand; W. Sams, St. James' Street; W. Stewart, South Bridge Street, Edinburgh; Hodges and M'Arthur, Dublin; &c. &c.

THE WEEKLY

MEDICO-CHIRURGICAL & PHILOSOPHICAL MAGAZINE.

No. XIX.] SATURDAY, JUNE 14, 1823. [*Price 4d.*

" FLORIFERIS, UT APES, IN SALTIBUS OMNIA LIBANT
OMNIA NOS, ITIDEM, DEPASCIMUR AUREA DICTA."

DR. GALL'S LECTURES,

(Continued from page 278.)

ON FATALISM.

UNDER the name of materialism we have seen that things very different are designated; it is the same with respect to fatalism. If it be maintained that every thing in the world, and the world itself, are necessary; that all that takes place is the effect of chance or of blind necessity, and that no supreme intelligence is mixed with nor in fact mixes with existing objects, this doctrine is a kind of fatalism differing very little from atheism. But this fatalism has nothing in common with the doctrine which establishes the innateness of the faculties of the soul and mind, and their dependence upon organization. I cannot then, under this first consideration, be accused of fatalism.

Another species of fatalism is that which teaches that in truth there exists a Supreme Being, creator of the universe, as well as of all the laws and properties connected with it; but that he has fixed those laws in so immutable a manner, that every thing that happens could not happen otherwise. In this system, man is necessarily carried away by the causes that compel him to act, without any participation whatever of the will. His actions are always a necessary result, without voluntary choice or moral liberty; they are neither punishable nor meritorious, and the hope of future rewards vanishes as well as the fear of future punishment.

This is the fatalism with which superstitious ignorance accuses the physiology of the brain, that is, the doctrine relative to the functions of the most noble organization in the world. I have effectually proved that all our moral and intellectual dispositions are innate; that none of our propensities or talents, not even the understanding and will, can manifest themselves independent of this organization. To which also may be added, that it does not depend upon man to be gifted with organs peculiar to his species, consequently with such or such propensities or faculties. Must it now be inferred that man is not the master of his *actions*, that there exists no free will, consequently neither a meritorious nor an unworthy act?

Before this conclusion is refuted, let us examine with the frankness worthy of true philosophy, how far man is submitted to the immutable laws of the Creator, how far we ought to acknowledge an inevitable necessity, a destiny, or fatalism. To unravel confused ideas, is the best method of placing truth in its clearest point of view.

Man is obliged to acknowledge the most powerful and determined influence of a multitude of things relative to his happiness or misery, and even over his whole conduct, without of himself being able either to add to, or subtract from that influence. No one can call himself to life, no one can choose the time, the climate, or the nation in which he shall be born; no one can fix the manners, laws, customs, form of government, religion, prejudices, or the superstitions with which he shall be surrounded from the moment of his birth; no one can say, I will be master or servant, the eldest son or

the youngest; I will have a robust or a debilitated state of health, I will be a man or a woman, I will have such or such a constitution; I will be a fool, an idiot, a simpleton, a man of understanding, or a man of genius, passionate or calm, of a mild or cross nature, modest or proud, stupid or circumspect, cowardly or prone to voluptuosness, humble or independent; no one can determine the degree of prudence or the foolishness of his superiors, the noxious or useful examples that he shall meet with, the result of his connexions, the fortuitous events, the influence of external things over him, the condition of his father and mother, or his own, or the source of irritation that his desires or passions will experience. The relations of the five senses with external things, and the number and functions of the viscera and members have been fixed in the same invariable manner, so nature is the source of our propensities, sentiments and faculties. Their reciprocal influence and their relations with external objects have been irrevocably determined by the laws of our organization.

As it does not depend upon ourselves to hear or see when objects strike our ears or our eyes, in the same manner our judgments are necessary results of the laws of thought. "Judgment, very rightly, says M. Tracy, in this sense is independent of the will, it is not under our controul, when we perceive a real relation betwixt two of our perceptions, not to feel it as it actually is, that is, such as it should appear to every being organised as ourselves, if they were precisely in the same situation. It is this necessity which constitutes the certainty and reality of every thing we are acquainted with. For if it only depended upon our fancy to be affected with a great thing as if it were a small one, with a good as if it were a bad one, with one that is true as if it were false, there would no longer exist anything real in the world, at least for us. There would neither be greatness, nor smallness, good nor evil, falsehood nor truth; our fancy alone would be everything. Such an order of things cannot even be conceived, it implies contradiction.

Since primitive organization, sex, age, constitution, education, climate, form of government, religion, prejudices, superstitions, &c. exercise the most decided influence over our sensations and ideas, our judgments and the determinations of our will, the nature and force of our propensities and talents, consequently over the first motives of our actions, it must be confessed that man, in several of the most important moments of his life, is under empire of a destiny, which sometimes fixes him like the inert shell against a rock; at others, it carries him away in a whirlwind like the dust.

It is not then surprising that the sages of Greece, of the Indies, China and Japan, the christians of the east and west, and the mahomedans have worked up this species of fatalism with their different doctrines. In all times our moral and intellectual faculties have been made to take their origin from God; and, in all times it has been taught that all the gifts of men came from heaven; that God has, from all eternity, chosen the elect; that man of himself is incapable of any good thought; that every difference between men relative to their faculties, comes from God; that there are only those to whom it has been given by a superior power who are capable of certain actions; that every one acts after his own innate character, the same as the fig tree does not bear grapes, nor the vine figs, and the same that a salt spring does not run in fresh water; lastly, that all cannot dive into the mysteries of nature, nor the decrees of Providence.

It is this same kind of fatalism,

this same inevitable influence of superior powers that has been taught by the fathers of the church. St. Augustine wished this very same doctrine to be preached, to profess loudly the belief in the infallibility of Providence, and our entire dependence upon God. "In the same manner, he says, no one can give himself life, no one can give himself understanding." If some are unacquainted with the truth, it is, according to his doctrine, because they have not received the necessary capacity to know it. He refutes the objections that might be urged against the justice of God; he remarks that neither has the grace of God distributed equally to every one the temporal goods, such as address, strength, health, beauty, wit, and the disposition for the arts and sciences, riches, honors, &c. St. Cyprian at that time had already said, that we ought not to be proud of our qualities, for we possess nothing from ourselves.

If people had not always been convinced of the influence of external and internal conditions relative to the determinations of our will, upon our actions, why, in all times and among every people, have civil and religious laws been made to subdue and direct the desires of men? There is no religion that has not ordained abstinence from certain meats and drinks, fasting and mortification of the body. From the time of Solomon the wise down to our own time, I know no observer of human nature who has not acknowledged that the physical and moral man is entirely dependent on the laws of the creation.

DR. GALL ON INFANTICIDE.

(Continued from page 281.)

Indeed! were it not so penible for a mother to resolve upon a similar action, child murder, the consequence of illicit pregnancies and the perfidy of men, would be infinitely more frequent. The violence of the impulsions which lead to the commission of an act so revolting to human nature may be conceived, when it is considered that the inclination of a mother for her offspring, often dumb during gestation, becomes singularly active at the period of accouchment. It must be supposed then, that, when a mother yields to this horrible suggestion, she is always stimulated to the act by violence; and that, in this manner, in the midst of the conflicting passions with which she is agitated, it is but just to examine how far the struggle deprived her of sufficient reflexion and even of the free use of her senses.

I have observed that both sexes experience once or twice every month, a sort of periodical derangement which troubles the harmony of their affections and habits, and which assumes the character of an irritation and melancholy with which the individual affected cannot account for. Persons of an irritable and debilitated constitution, experience this derangement in a very sensible manner. I shall enter more particularly in another place into the detail of this subject. It will be sufficient here to observe, that this phenomenon takes place more particularly at the time of the periodical evacuations. Now, accouchment ordinarily takes place at this very period, that is, at the time when the woman would have had the tenth menstrual discharge; thence it follows, that every circumstance capable of affecting or troubling a woman, strikes her mind more forcibly at that time. It has generally been observed, that women at that critical period are more susceptible, more despairing, more low spirited, and more easily moved. Is it surprising at that time they are more subject to wander and to form fatal resolutions? This same periodical derangement of the soul has sometimes also the most deplorable influence over man. We are acquainted with an individual, who, once a month, is tormented, for two or three days, with the thought

and even the desire to commit murder. This desire places him in a state of anguish and despair; he then runs to a friend and begs him to preserve him from the misfortune with which he is threatened. The fit goes off, and he returns home delivered from every kind of temptation. It is during this period that those tormented with the propensity to suicide, commonly put an end to their days.

This is not the only example which shews that the affections and passions prolonged, even when they do not give rise to real insanity, are capable of altering the dispositions of the soul, and so far weaken the moral liberty, that it is difficult, in similar cases, sufficiently to appreciate the culpability of the actions. The following example will furnish a proof of this.

Other cases of a moral liberty very much weakened.

"The wife of the honest Joseph Prohaska, a soldier in the garrison at Breslau, in Silesia, inspired a brutal passion in the first lieutenant of the same company as her husband. This virtuous woman firmly rejected the proposals and importunities of the lieutenant, without mentioning the circumstance to her husband. One day when she brought him his dinner to the guard house, whither he had been designedly sent, she found him sitting upon the camp bed, his countenance pale and disordered, and his eyes fixed before him. Take that back again, said he to her, I have already been regaled to-day in exercising and on parade, and I have now no appetite. He made an appointment with her at seven o'clock in the evening at his post. In the mean time she learned, from one of his comrades, that the first lieutenant had several times taxed him when exercising, with want of attention to the word of command and with neglecting to take care of his arms; that to this he had added injurious words, and with his own hands had repeatedly struck him with his cane; that, when the battalion had fallen in, the colonel, according to custom, ordered the officers to note down the careless soldiers, and to give them twelve blows with a stick at the first pause. Prohaska was twice among the number of those thus noted for negligence, and had been punished accordingly; and, as his character as a man was roused within him, and because he complained, although with the greatest mildness, of the injustice done to him, he was treated as a mutineer, and that fifteen more blows compelled him to be silent.

"The unfortunate woman interrupted this narration several times, by exclaiming: *Jesus! it is I who am the cause of it; poor man you must suffer for it; he will force me to it!* she went home.

"To give vent to her feelings, she told her friends and the people of the house where she lived what had taken place during the day, and her fatal intercourse with the ferocious executioner of her husband. At seven o'clock she went upon the ramparts, where her husband was waiting for her. As soon as she was alone with him, she disclosed every thing to him which her natural goodness up to that period had induced her to withhold, and begged him, as soon as the guard was relieved, to make his complaint to the chief officer of the regiment. The unfortunate Prohaska listened to her with apparent calmness. After she had done speaking, he eat the supper she had brought him in silence, and only spoke to wish her good night, and to beg her to retire. The poor woman, seeing that her husband, as was usual, did not give her the parting kiss, asked him 'if he was angry with her, and if he had the least suspicion of her innocence?' 'No,' he replied, 'I have no ill will against thee. You would, nevertheless, have acted better, had you made known to

me sooner the views of the first lieutenant; we should, in that case, have now been beyond the frontiers. That is now no longer possible, without running great risks as a deserter; for I could wager that before to-morrow this time my pass will be withdrawn.' 'It is already withdrawn,' replied the woman, melting into tears; at half past three o'clock the serjeant came and asked me for it, telling me they were all going to be changed for new ones, in order to render counterfeits more difficult.' 'God help us!' said Prohaska: he laid hold of his wife and kissed her warmly, and then suffered her to depart. This unfortunate woman related all these particulars to her friends, who deposed to the same effect at the trial, and of which Prohaska acknowledged the correctness.

"The next morning, it was on a Friday, Prohaska returned from guard. He found the table spread out, and sat down and ate with apparent tranquillity. A soldier who lived in the same house with him, declared upon the trial that Prohaska had always been a very mild husband and an attentive father, but that these two qualities had never manifested themselves so strongly than since this Friday, up to the fatal moment when, abandoned by his guardian angel, deceived by an erroneous piety, and extremely weakened in his moral and physical qualities, he fell. On the Saturday, Prohaska worked the whole of the morning. After dinner, during which the conversation had never once touched on the subject that grieved him, he said in an under voice to his wife, "It is useless to complain. A soldier in Major W***'s corps has preferred complaints against his officer; he was right, but that has not prevented him from receiving fourscore stripes over the back, covered only with his shirt. I shall see, the life of a soldier is horrible; henceforward I will suffer in honour of God; he has suffered himself, and that will be imputed to me as a merit; I will act so as to have intercessors in heaven who will pray for me, that, after my death, I may not remain too long in purgatory. I will forgive the man who has offended me—do you the same. To-morrow we will confess and take the sacrament, that the celestial bread may give more strength to our resolution, and that I may not curse the ruffian—meaning, without doubt the first lieutenant.—He said no more. They confessed and took the sacrament. According to all appearances, calmness was re-established. At dinner, Prohaska ordered some wine to be brought, that, as he observed, he might regale himself a little. When he got up from table, there was a little wine left, which he gave to another soldier, saying, as he handed it to him, "drink, comrade, and if ever I have caused you any trouble, forgive me." His wife asked him if he would take some coffee. Prohaska thanked her, and proposed to take a little walk. The unfortunate woman consented, little suspecting that she was going to her death. They took their youngest child with them, leaving the oldest to the care of their friends. They passed through the town, the woman carrying the child in her arms.

"Prohaska, under pretence of getting out of the sun, took his wife under the willows planted along the glacis of the citadel. Having sat down together near a place called the Mice Pond, Prohaska put his wife in mind to give the child the breast, and it soon after fell asleep. She laid it down on the grass, and covered it over with a handkerchief. Prohaska, at that moment, entirely absorbed with the idea of killing his wife, embraced her, clasped her in his arms with transport, and having kissed her again, asked her if in her conscience she had that day made an acknowledgment of all her sins, without exception;—

whether she had felt a true contrition, and if she had received a general absolution. To all these questions she answered in the affirmative. He clasped her once more with his left arm, and whilst they were mutually lavishing on each other the most tender caresses, he pierced her heart with a knife which he held in his right hand. He then laid his wife gently down upon the grass—that wife whom he had just sacrificed in his religious delirium; and, as convulsive motions appeared to discover in her that the vital spark was not yet extinct, and fearful she might be in great pain, he wished to put an end to it, and cut her throat. All he did now was to take the key of his lodgings out of her pocket; and, after having washed his hands in the pond, and thrown the knife into it, he took his little child, still asleep on the grass, and returned thence by another road. According to his own account, he ran very fast, because he was afraid if the body of his wife was seen, that he should be suspected and stopped; which would have prevented him from snatching his two cherished children from a perverse and wicked world, and from sending them to heaven to become his intercessors.

"On his return home, he put the still sleeping infant in the cradle; then went to his neighbour's, begged the wife of the old messenger of the Regency to go out at the gate of Schweidnitz, and pointed out to her the place where she would find his wife, adding that he had left her very well but very weak, as she had found herself indisposed during the walk; and that she had sat down to rest herself, and that she had begged him to return to the house with the child. He concluded by saying that he was too tired to return for her himself.—The good woman hastened to comply with his request, and wished to take the child with her; to which Prohaska objected by observing, that it would only keep her longer on the way. Scarcely was he left alone, than he ran home with the child, where he had left the other asleep; he knocked both their brains out with a small hatchet, placed them in each other's arms on the bed; and, after having carefully shut the chamber door, he went upon the great guard, and with a certain air of contentment in his looks and gestures, he told them he had killed his wife and two children. 'Now,' added he, 'let Lieutenant V*** make love to her. She and my children are secure from seduction and dishonour; they will thank me for the happiness they enjoy, and will pray for me in heaven.'

"The council of war that judged him, paid no attention to the extenuating motives, and did not take them into their consideration to determine the degree of culpability relatively to the moral liberty. Prohaska was treated, not as an individual labouring under disease, but as a man in sound mind and body, as a man who had acted upon his own perfect free will, consequently as an assassin with premeditation: he was condemned to be beheaded; and to aggravate his punishment he was refused not only in prison, but also at the place of execution, the faculty of being exhorted and accompanied by an ecclesiastic."

This fact proves how far violent grief and superstition, or a misunderstood religion, may obscure the mind, and palliate the conduct of unfortunate people, who, in similar situations, commit crimes. Certain meats, and particularly spirituous liquors, produce in many people particular irritations which have the effect of a kind of intoxication, without the latter nevertheless being accompanied with the ordinary symptoms of such a state. It is well known that wine and brandy render a man courageous, quarrelsome, eloquent, sincere, amorous, sad and gay. When Peter Petri had not drank anything,

he always appeared to be plunged into a kind of stupidity and apathy; and any thing might be done with him. But as soon as he had taken a few glasses of brandy, then he became a tiger, and, without distinction, attacked equally his friends and his enemies. A woman at Bamberg, as soon as she had drank brandy, felt the most irresistible desire to set fire to some house or other; but scarcely had this irritation exhausted itself, than she was horror-struck with herself. But as she did not keep a sufficient guard over herself in abstaining from her favourite drink, she was guilty of arson no less than fourteen times.

The most embarrassing case, relative to the degree of culpability, in abstracting from the laws, is that where a particular quality acquires of itself, and as a consequence of organization, so high a degree of energy, that it forms the most predominant character of an individual. I have already proved that every faculty and propensity may arrive at this degree of energy. If that takes place with respect to an indifferent or praiseworthy thing, it may be a subject of congratulation though not of merit. Many, from their nature, are called to devotion; others would be obliged to do extreme violence to their feelings, to send away, without assisting them, a lost child, or an old man without support. Many men have a particular inclination to build, to travel, to quarrel, &c. One burns with an insatiable desire of glory—another cannot even spare his best friends when any poignant witticism presents itself to his mind. We found, in a house of correction, a young nobleman extremely proud, who had been confined there because he was ashamed of all kind of work: even in that house, he would only speak with certain persons, and his questions announced an uncommon degree of penetration. The nervous systems of certain external senses may in like manner acquire so extraordinary a degree of activity and energy, that they may determine, if we may use the term, the principal character of an individual. This kind of energy is even sometimes hereditary. In a Russian family the father and the grandfather became early victims to their propensity for getting drunk; the son, although he foresaw the consequences of this, continued to give himself up to it in spite of all he could do to the contrary; and the grandson, a child about five years old, already manifested the most decided inclination for strong liquors.

Why should not this imperious activity also take place in other organs which, by the excess of their action, lead to evil? The reality of a similar exaltation is founded upon so many examples, that every objection dictated by superstition or prejudice would be absurd. The individual who experiences this exalted energy, is governed by some particular sensation or idea in which his whole soul is centered. If this violent action be not restrained by superior force, man becomes the slave of it. If faculties of a superior order act at the same time in a contrary sense, an obstinate struggle results between the fatal concupiscences of the individual and the penible opposition of his reason. Is it surprising then that evil propensities are frequently more powerful than good, and that the flesh is often stronger than the mind? This condition, it is true, is not a real alienation of the mind, but rather a partial exaltation or subjection of the soul, and it offers an incomprehensible contract between man and the animal in man.* If the exaltation takes place in a quality whose too energetic activity leads to criminal acts, a more unfortunate condition

* For the flesh lusteth against the spirit, and the spirit against the flesh: and these are contrary the one to the other; so that ye cannot do the things that ye would. (*St. Paul to the Galatians*, c. v. v. 17.)

for any individual, or a more perplexed one for the judge can scarcely be imagined, for it produces effects apparently so contrary, that, on the one hand, it is scarcely possible to distinguish it from a state of reason; and, on the other, it appears as if it were confounded with folly. Let us examine some of these unfortunate inclinations, by beginning with the PROPENSITY TO THEFT.

Exalted propensity to theft, annihilating the moral liberty.

Victor Amedée the First, King of Sardinia, wherever he went, always took objects of the smallest value. Saurin, a minister at Geneva, although imbued with the best principles of reason and religion, fell continually into the propensity of stealing. Another individual from his earliest age was a prey to this inclination. He enlisted as a soldier, under the hope of being restrained by the severity of the discipline; but continuing to thieve, he was on the point of being condemned to be hanged. Always endeavouring to conquer his fingering propensity, he studied divinity, and became a Capuchin friar. His evil spirit followed him to the cloister: but as he no longer steals any thing except trifles, he gives himself up to his inclination without uneasiness. He steals scissors, candlesticks, snuffers, tea-cups, tumblers, &c. and carries them to his cell. A person holding a situation under government, at Vienna, had the most singular mania of only stealing household utensils. He hired two rooms to put them in; he neither sold nor made any use of them whatever. The wife of the celebrated physician Gaubius, had such an invincible propensity for thieving, that whenever she bought anything, she always endeavoured to purloin something. The Countess M*** at Wesel, and J*** at Frankfort, had also this same propensity. Madame de N*** had been brought up with particular care. Her wit and talents assured her a distinguished place in society. But neither her education, nor her fortune, were proof against the most decided propensity for stealing. Lavater mentions a physician who never left the room when he visited his patients without stealing something from them, and afterwards never thought any more about it. His wife examined his pockets every night, and used to find in them keys, scissors, thimbles, knives, spoons, buckles, cases, &c. which she returned the next morning to their respective owners. Moritz, in his *traité experimental sur l' ame*, relates, with the greatest accuracy, the history of a thief who had the propensity of thieving to such a degree, that on the point of drawing his last breath, he actually stole the snuff-box from his confessor. Dr. Bernard, physician to the King of Bavaria, told us of a native of the province of Alsace, of his acquaintance, who everywhere committed larcenies, although he had abundance of every thing, and was by no means avaricious. He had been carefully brought up, and his vicious propensity had several times been visited with punishment. His father made him enlist for a soldier. Even this did not correct him. He committed several considerable thefts, and was condemned to be hanged. We found a similar propensity in the son of a celebrated philosopher. He was distinguished from all his school-fellows for his talents; but, from his earliest age, he robbed his parents, sister, servants, companions, and masters. He stole the most valuable books from his father's library. Every method was tried to correct him; he was made a soldier; and was several times severely punished, but all proved useless and unavailing. The conduct of this unfortunate young man was regular in every other point; he did not justify his acts; but, if he was addressed on this subject, in the

most friendly and energetic terms, he evinced the greatest indifference, and appeared not to hear them. The paymaster of a Prussian regiment of cuirassiers, a man in every other respect instructed and gifted with moral qualities, had such a decided propensity for thieving, that he frequently picked his officers' pockets of their handkerchiefs on the parade. His general had a great respect for him; but as soon as he appeared, every thing was shut up with the greatest care, for he often used to take away handkerchiefs, shirts, and even women's stockings. Besides, whenever the things he took were asked for again, he gave them up with the greatest cheerfulness. M. Kneisler, the director of the prison at Prague, told us of a rich merchant's wife who continually robbed her husband in the most expert manner. She was obliged to be shut up in a house of correction. She was no sooner emancipated, than she began her tricks again, for which she was a second time shut up. Set at liberty once more, she committed new thefts, and was a third time condemned to a more rigorous confinement than the preceding. She even committed thefts in the prison. She made a hole in the most ingenious manner in a stove that warmed the room where the cash box of the establishment was kept. The repeated thefts she committed were remarked. Bells were uselessly fixed to the doors and windows; but at length pistols, which were placed so as to go off on the box being touched, frightened her so much, that she had no time to make her escape through the stove.* In a prison at Copenhagen, we saw an incorrigible thief, who sometimes distributed the fruits of his vocation to the poor. In another place, a thief confined for the seventh time, assured us, with regret, that he did not see how it was possible he could conduct himself otherwise. He earnestly requested to be detained in prison, and that he might be provided with the means of earning his livelihood.

A thousand similar instances might be quoted, and which prove, at the same time, that the propensity to theft is not always a consequence of a bad education, laziness, or poverty, the want of some bad qualities, nor even a defect of morality and religion; and so true it is, that everybody shut their eyes on insignificant larcenies when committed by rich persons, who otherwise possess good qualities. These thefts are called distractions. But may not the same propensity be found in poor men? Does it then change its nature? Does it change from the importance of the objects stolen? there results from similar cases, that much prudence and experience are necessary to fix with certainty the degree of culpability.

Let us now consider, under the same point of view, another evil propensity.

(To be continued.)

* In several parts of Germany, the mouth of the stove opens into quite a different apartment to that in which the stove itself stands, &c.

Case of Cancer of the Lip, in which the Operation lately recommended by M. Richerand, was performed. By C. A. Bull, M. D. *Surgeon to the South Infirmary, and Teacher of Anatomy and Surgery, Cork.*

April 28th, 1823.—Catherine Creedon, ætatis about sixty, applied at the South Infirmary for the cure of an ulcerated cancer of the lower lip. The disease commenced about two years ago, and now extended from one angle of the mouth to the other, and in depth nearly to the reflection of the mucous membrane from the gums to the lip, presenting a fungous-looking ulcerated surface, much everted, so as nearly to reach the lower margin of the chin when the jaws were closed. The integuments

of the chin beneath the tumour were of a dark red colour, which appearance, however, I was inclined to attribute to irritation from the acrid discharge of the ulcer. On examination of the neighbouring glands, I could not discover any enlargement or hardness of them, as we generally find in ulcerated cancer of long standing. The disease presented so hideous an appearance, that on first view of it I told the patient that I feared it was too late to attempt any thing in the way of operation; but the poor woman begged so earnestly that something might be done, that I was induced to admit her to a bed in the hospital. Having frequently, within the last three years, used the arsenical plaster with much success in cases of ulcerated cancer in different parts of the body, where operation was deemed unadvisable, I thought it might, perhaps, be employed here, though the case was not one well adapted for its application. Reflecting on the case, I recollected having read, in the Quarterly Periscope of the Medico-Chirurgical Review for September, 1822, an account of a case of cancer of the lip, in which M. Richerand performed an operation different from that hitherto in use, and, on reference to it, the similarity of the cases struck me so forcibly, that I determined on giving it a trial in this instance; though, I must confess I was not so sanguine as to expect the extraordinary regeneration of parts, which is said to have occurred in M. Richerand's case. Accordingly, on the 1st of May I performed the operation, in presence of my colleague, Dr. Woodroffe, Mr. Hobart, Apothecary to the Institution, and several of the pupils, in the manner directed by M. Richerand, but instead of his flat scissors I used the scalpel, which I consider preferable for many reasons. I commenced it by an externally incision through the integuments, and extending beneath the tumour from one angle of the mouth to the other, in form of a long crescent, as recommended. In the next incision the whole of the diseased parts were removed at one stroke of the knife, cutting so low as the frœneum of the lip. The artery on each side was secured between the fore-finger and thumb of an assistant, until included in a ligature. In place of agaric, I applied lint to the wound, then a compress of the same, and over it a bandage. On removal of these the third day from the operation, I found that suppuration was fully established, and the surface disposed to healthy action. It has been dressed every day since with dry lint, and to-day (twelfth) is quite healed, not by granulation, but by a process which, indeed, I did not expect, viz. eversion of the mucous membrane and approximation of it to the skin, with *considerable elevation* also; insomuch, that there is hardly any appearance of cicatrization, and a new lip is actually formed; so that, when the jaws are closed, the upper lip and the new surface approach each other so nearly, that the loss of parts appears quite inconsiderable. Much of this appearance, however, must be attributed to that falling in of the jaw peculiar to persons advanced in life. For the first six days after the operation the patient could not retain the saliva, which flowed constantly over the wound, but she now possesses that power almost to its full extent.

Cork, May 10th, 1823.

Case of attempted Suicide by Nux Vomica. By C. F. Tacheron, M. D. *&c. Paris.*

Mary Osmiwy, aged twenty-seven, teacher of music, of a sanguineo-lymphatic temperament and a good constitution, resolved, in consequence of some domestic grievances, to put an end to her existence, and obtained from a druggist on the 2d February, 1821, a drachm of nux vomica for

this purpose, under the pretext of destroying rats with it. She took the whole of this quantity in a glass of wine; and a quarter of an hour afterwards was seized with pain, and a sense of weight and heat in the stomach, with a burning sensation in the pharynx, and with a painful feeling of rending and of lassitude in the limbs. To these succeeded convulsions, stiffness of the joints, especially of the knees; afterwards, the gait became tottering, and the whole body was seized with symptoms of complete and violent tetanus, the jaws being firmly locked, and the limbs rigidly extended. *Milk* was given in large quantities; which excited copious vomitings of alimentary substances, amongst which, most probably, was a portion of the poison. She was brought to the *clinique interne* of the School of Medicine, at half-past three o'clock of the same day, when the following were the symptoms: a complete state of tetanus, aggravated at intervals by violent convulsive movements. The intellectual faculties appeared a little troubled: she wept occasionally. The cheeks and eye-balls were flushed; the gums red; the tongue inflamed and contracted; the thirst ardent; pharynx constricted; the stomach painful; the pulse frequent, and the skin hot.—*Teatment*. Oleaginous and emollient draughts with lavements of the same description.

Feb. 3d.—The tetanic symptoms have nearly disappeared; but the pains of the voluntary muscles, especially those of the neck and limbs, remain and are greatly increased by attempts at motion. The intellectual functions are restored; but the face is still flushed, and the tongue and palate inflamed. Thirst is still ardent. Pain of the stomach continues, and is attended with colic-like pains in the bowels. She has had two vomitings of alimentary matters, and one stool; pulse rather soft than hard, but frequent.—Sweetened gum-water, holding aperient and cooling salts in solution. Oleaginous and emollient lavements.

4th.—Pains of the neck and limbs remain, as does also the inflammation of the pharynx and palate. The thirst is less urgent; respiration free; pulse small, soft and less frequent. She experienced a loss of sight for two hours, and four accessions of cold rigors followed by warm perspiration. Her sleep was agitated, and attended with convulsive movements from time to time. She has passed eight liquid yellow stools.—Same treatment.

5th.—She passed a calm night. Slight pain of the epigastrium and belly. Sight feeble. Skin soft and moist. She has passed three motions.—Rice-water acidulated with syrup of vinegar. Half a dram of diascordium. Rice.

From this period she rapidly recovered, and was discharged cured on the 14th of the same month.

On the Employment of Belladonna in various Diseases. By Powell Charles Blackett, Esq. *Member of the Royal College of Surgeons, London.*

Having employed the atropa belladonna with great advantage in several nervous and inflammatory disorders, I am desirous to draw the attention of the readers of the Repository to the subject. The particular preparation of this medicine, which I have been in the habit of using, is a very strong tincture made from the extract in the following proportions: take ten drams of the most carefully prepared extract of belladonna and one pound of proof spirit, macerate for fourteen days, and then filter. I endeavour to procure the extract in a state of its greatest activity, and possessing the virtues of the plant undiminished in the preparation, and I consequently find a single drop of the tincture which is made from it to be more efficacious than a quarter of a grain dose of the extract, as it is usually obtained from druggists.

I have frequently employed this tincture in cases of mania, in various forms of convulsions, in hysteria, and in pertussis, with decided efficacy. In all cases of its internal use, I have commenced with small doses, generally with two or three minims in the day. I have been led to embrace this cautious mode of commencing the remedy, because I have found that when given at first in a larger dose, owing to peculiar states of the constitution, especially in old subjects, it sometimes depresses the powers of life to a greater extent than was wished. The rapidity with which I have increased the dose, or the extent to which I have carried it, has always been regulated by its effects, by the circumstances of the case, and by the constitution of the patient; always keeping it in mind, that its effects occasionally are not very marked for some time, when they suddenly evince themselves in a very decided manner; thus showing that, in some instances, it does not act upon the nervous system until its exhibition has been carried to a certain extent, when its effects are quickly expressed throughout the whole frame.

In several forms of cutaneous or superficial inflammation, I have experienced the greatest service from the external use of this tincture, either when added to a lotion, or to any ointment which appeared most suitable, in other respects, to the particular nature of the case. When I have employed it in a lotion, a dram of the tincture to eight ounces of the liquid has been the proportion adopted, and in this form I have found it very beneficial in external inflammations and in irritable ulcers.

I have used the extract either alone, or combined with some ointment, with decided advantage, in spasmodic stricture of the rectum; and I have found it useful in gonorrhœa, especially when chordee was present, when conjoined with double the quantity of mercurial ointment, and rubbed along the course of the urethra. Without offering more general remarks on the use of this narcotic, I shall conclude with the particulars of a case of mania in which I gave it with advantage, after other modes of treatment had failed in accomplishing a cure, although they may have acted beneficially in disposing the system of the patient to the influence of the belladonna.

5th March, 1819.—C. G. aged forty-eight, of a pale complexion and spare habit, who had been accustomed to a very active life, became, in consequence of repeated misfortunes in business, the subject of mental derangement, in the form of melancholia, and being of a religious disposition, his mind was constantly filled with apprehensions of his future state. I saw him about two weeks after these commencing symptoms of derangement, when he had all the actions of a furious maniac. His bowels were constipated; his tongue foul; urine in small quantity, and of a high colour; pulse 86; skin dry and hot. He complained of pain at the scrobic. cordis. After subjecting him to the usual mode of coercion, a course of purgatives, combined with anodynes and occasional injections, was entered on, general and local blood-lettings were employed, and blisters applied to the nape of the neck. This treatment, which was varied according to circumstances, and conjoined with various internal remedies, was continued until the 5th of April, when I resolved to employ the belladona, from the circumstance of my having used it with success in four cases of a similar nature; it was prescribed in the following manner: —℞ mist. camphoræ, ℥vss. tinct. belladonæ, ℳij. liquor. antim. tart., ʒiij. M. capiat cochlear. dua ampla, sextis horis.

April 6th.—The symptoms were much the same as before, but he had

passed a considerable quantity of urine. A draught composed of camphoge and infusion of senna, was ordered, on account of the confined state of his bowels, and directed to be repeated when circumstances required it.

10th.—The urine was greatly increased; and the symptoms of derangement were not so violent. His bowels were natural; his tongue clean; his pulse at 76, and regular. He was directed to take *three* tablespoonfuls of the mixture every four hours.

17th.—He has passed the nights in a more composed state, and has enjoyed some lucid intervals. Pulse 70; tongue clean; bowels regular; the pupils of the eyes rather dilated. —℞ mist. camphoræ, ℥vijss. tinct. belladonnæ, ♏iv. acid. citrici, ℈j. M. capiat cochlear. tria magna quartâ quâque horâ.

20th.—The pupils are quite dilated, and attended with loss of sight, and a great propensity to sleep. The countenance was rather flushed, but all the symptoms of mental derangement had left him. His pulse, tongue, and bowels, were natural.

The belladonna was discontinued for seven days, when his sight returned. His countenance was quite calm and cheerful. The following mixture was now used:—℞ aquæ menthæ viridis, ℥viij. tinctura belladonnæ, ♏ij. ft. mist. cujus capiat cochlearia tria magna, nocte maneque.

This mixture was continued for three weeks, and an aperient draught given occasionally. He has continued well from that period up to the present, without the least appearance of a relapse.

From the experience I have had of this remedy, I consider that we cannot expect much benefit from its internal use until it has nearly produced a temporary loss of sight.

Park Street, Grosvenor Square, April 11.

Case of Bulimia.

Dr. Crane was called to a lady, aged 26, who was affected with an extraordinary appetite, so as to consume at each repast three or four pounds of meat, without reckoning bread and other viands. This state affected the lady so much, that she would never consent to eat in the presence of a stranger, or even of her own family. In general she was obliged to vomit a short time after her meals, when she rejected what she had swallowed, accompanied with viscid matter, resembling the white of egg, and having a sour taste. Shortly after, she took a large quantity of food again, which she vomited in a similar manner. Several physicians were now consulted, who attributed the complaint to disease of the pylorus. A great variety of medicines were employed without success, when all at once the lady was seized with continued fever, one of the leading symptoms of which was loss of appetite, but which returned with the same intensity as soon as the fever subsided. This loss of appetite during the fever, and other circumstances, induced Dr. Crane to suppose that the bulimia arose from a particular irritability of the stomach, increased by the presence of aliments; in consequence of which he resolved to give his patient nothing but liquids, such as milk, sago, arrow-root, &c. No relief followed this measure; and Dr. C. confined the diet to soup and nutritive glysters. At the end of six weeks, soup with bread was allowed, and the solid food gradually increased; the appetite then became natural, and has continued so ever since, a period of nine years.—Some pills were given in this case, but their composition is not mentioned.—*Journal der Practischen Heilkunde, von W. Hufeland.*

Partial Paralysis of the Retina.

A furrier, aged 60, was attacked with a violent pneumonia, attended with great difficulty of breathing and cerebral congestion. He was bled several times; rigid diet, leeches, and pectoral drinks, were prescribed.—The patient became convalescent; he had neither suffered confusion of the head nor noises in the ears, when on a sudden he felt a violent pain in the right coronal region. This pain soon ceased; the patient went to sleep, and, on awaking, he found that his left eye was become the seat of a singular affection, which subsists at this time. The right eye being shut, all the objects that are placed on the outside of the axis of vision are invisible. He distinguishes perfectly those situated on the side of the nose. A sheet of white paper, placed before the left eye, appears cut into two parts,—the internal half visible, the other not. A black line traced upon a white ground, a stick held horizontally, afford the same result. If a person places himself altogether on his left side, and passes before him, he sees absolutely nothing; in short, he only sees the image when placed within the axis of the eye. The sight is very good in that part of the retina which still remains sensible; the iris is perfectly contractile in its whole extent; the pupil is rather larger than usual. The patient refused to submit to any treatment.—*Bulletin de la Societé d'Emulation Medicale.*

HOSPITAL REPORTS.

GUY'S HOSPITAL, FRIDAY, JUNE 6.

Operations by Sir A. Cooper.

Amputation below the knee.—Case congenital club foot.—A male patient, about 18 years of age, full habit, fair complexion.—On laying open the muscles of the amputated extremity, they were, for the most part, found converted into an adipose substance, from the want, no doubt, of the necessary exercise for such a length of time—according to his own statement, the patient had been able to make no use of the leg from the age of nine. During the operation of removing the limb, the patient expressed the most poignant degree of suffering, and even after the limb was removed, he cried out, that he felt the pain still running down to his very toes.

Removal of a Steatomous tumour from the back, situated somewhat below the base of the scapula. Patient, a female past the prime of life. The only thing worthy of remark, in this operation, was the criterion, pointed out by Sir Astley, to distinguish, previous to making an incision, whether the tumour be actually one of a steatomous nature, or not: this is done by grasping the tumour in the hand and compressing it; when, if it form into lumps and wrinkles upon the surface, it may safely be pronounced of this description.

Case of Fungus Hæmatodes.—In No. 15 of this Magazine, we gave the history of this case with a portrait engraving of the patient; who, we regret to say is now suffering from difficulty of breathing, occasioned partly by enlargement of the glands in the neighbourhood of the larynx, and probably from internal disorganization—he is also labouring under considerable œdema of the lower extremities, with which he was by no means affected on his first admission to this hospital.

Died on the 3rd instant, and was instantly removed by his friends to the undertaker's.

Extract of a Letter addressed from a Correspondent to the Editor of the MED. CHIRUR. & PHIL. MAG.

Edinburgh, May 31st, 1823.—"You may think it singular that you have not heard from me for such a length of time. Medical news here, of any importance, is very rare indeed: in short, surgery is at so low an ebb in this infirmary, that we have scarcely a case for operation once in six months. I have been informed by those immediately on the spot, that an operation of as much importance as an amputation has not been performed for a considerable length of time. There is a great *demand for the Numbers of your Magazine here*—but they are rather scarce, it appears; and in order to oblige a friend, I forwarded the only set in my possession to Glasgow a few days since."

*** Whether we ought to rejoice or lament at the scarcity of surgical operations in the northern metropolis, are two different parts of speech. In London, of late months, surgeons in the principal hospitals have also had very little occasion for their knives (without the forks); so that, in point of information on this subject, we

are comparatively in the same predicament as our neighbours:—our friends, consequently, need not be surprised at the recent lack of similar intelligence, which we shall always be the first to communicate, whenever the occasion may present itself.—*Ed.*

Annual Report from the National Vaccine Establishment, to the Right Honorable ROBERT PEEL, *principal Secretary of State for the Home Department.*

Percy Street, 21st March, 1823.

Sir,—The more than usually numerous applications which have been made to us for vaccine lymph in the course of the last year, give us reason to believe that the confidence of the world in vaccination is increasing; and afford, at the same time, a strong proof of the wisdom and benevolence of Parliament in having provided an establishment where this resource is always to be procured. We have dispatched it, since our last Report, to the East and West Indies, to Ceylon, to the Cape of Good Hope, the island of Mauritius, to the coast of Africa, to New South Wales, &c. &c. We have also sent the lymph to France and to Italy, and to almost every part of this kingdom, and have received the cordial acknowledgments of our correspondents for the promptitude with which their sudden demands have been supplied. That this has been the means of preventing much calamity, we are well convinced; for the small-pox has prevailed as an epidemic with more than ordinary malignity in various parts of this island lately, and has committed great ravages in those districts where it found victims unprotected against it by a previous process. The advantages of vaccination in places subjected to these severe visitations, have been confessedly decisive and remarkable; those who had used this resource being observed to remain generally unhurt in the midst of danger; and, if there were any whom the contagion was able to infect, these were remarked, almost universally, to have the disease in that mitigated form which is not attended with danger.

We are not surprised, therefore, to find that, amongst the higher orders of society who think for themselves, and take the trouble of comparing probabilities and of drawing just inferences, vaccination has been used to a greater extent in the last than in former years. But, amongst the lower orders of the people, deep-rooted prejudices are difficult to be overcome; their improvidence renders them indifferent to advantages which are not of obvious and instant application; and terror alone, under circumstances of pressing and immediate danger, induces them to adopt this safe and easy course. These, therefore, it is the constant object and care of the Board to excite to a proper sense of the humane solicitude of the legislature for their safety, and to impress upon them the necessity of employing vaccination forthwith for their protection.

These warnings are more especially called for in those districts where the small-pox, by not having appeared lately, has lost something of its terrors; where the inhabitants have been betrayed thereby into a dangerous supineness, and the practice of vaccination has been neglected.

(Signed by Sir HENRY HALFORD, *and the other Members of the Board.)*

MEDICO-BOTANICAL SOCIETY.

At the Meetings of this Society, on the 11th of April, and 9th of May, Sir Alexander Crichton, M.D.F.R.S. in the Chair, Mr. Frost, the Director, read a paper on the essential oil of bitter almonds. Experiments were made before the Society upon this oil. A paper was read on Atropa Belladonna, and another on several medicinal plants used by Swiss Practitioners; afterwards by Mr. P. J. Brown. Mr. Frost afterwards delivered a Lecture on Stalagmus Cambogeoides, and on Acorus Calomis.

MELANGE.

Tumors of the Axilla.—M. Dupuytren presented the Royal Academy of Medicine at Paris, with the case of a young woman who had two tumors, one in the right axilla, and a second, somewhat smaller, behind the shoulder of the same side. The anomalous character of these swellings forbad an operation; but the patient, fearing this result, quitted the Hotel Dieu. But the growth of these tumors, and evident symptoms of an affection of the heart and the large vessels, compelled her to return to the hospital. Some time after this she died. On dissection, it was found that the swelling behind the shoulder communicated with that under the axilla, and this was extended by a sort of pedicle between the clavicle and first rib, penetrated into the chest, and was lodged in the superior vena cava. This vessel was filled to a great extent by the accumulation of the cancerous matter which composed the bulk of these tumors. —Is it probable that this organic alteration, developed in the vena cava, had extended itself so as successively to form the two swellings? Every thing leads one to suppose that this is the order in which

the pathologic phenomena succeeded each other.—*(Revue Medicale, Fevrier.)*

Vinegar in Colica Pictonum.—Dr. Kolmodin, in the southern district of Gothland, has related a case of colica pictonum, which he met with in a painter of that country. After trying a great many different remedies, some of which are said to be often useful, without the slightest benefit whatever, he at last administered frequent doses of wine-vinegar, in conjunction with Epsom salts: when the medicine had freely opened the bowels, every symptom left the patient, and next day he was quite free from complaint.—*(Svenska Lakare Sallskapeto Handlingar, Sjunde Bandet.)*

Waters containing Carbonic Acid.—It results from many observations made by M. Desportes, that the use of Seltzer water, either natural or artificial, the water of Pougues, or, generally speaking, all those waters containing carbonic acid gas, should not be lightly recommended, and that the idiosincracy of patients should previously be consulted; and that the first effects of such waters prescribed during meals, mixed with wine, should especially be observed. The author has seen the action of these waters derange the digestive functions, and, by sympathy, produce an irritation of the brain, which put on at first the character of intoxication: with several patients, severe nervous symptoms and a threatening of asphyxia were the consequences, and particularly violent pains in the region of the heart.—(*Revue Med.*)

Dr. GALL DISSECTED THE BRAIN, upon his own principles, on Tuesday last, at Carpue's Theatre, in the presence of Sir A. Cooper, Dr. Pearson, and a number of other distinguished professional characters. If subjects are provided, we are informed, the dissections will be repeated, at the same place, on Sunday, (To-morrow) at One o'clock—when the price of admission will be half-a-guinea. Dr. Gall leaves London, on his return to Paris, on Wednesday next.

BIRTH.

On Saturday, 7th inst. the Lady of Dr. Golding of a son.

MARRIED.

On the 6th inst. John Thomson, M.D. Surgeon, R.N. of Hermitage Place, Islington Road, to Sarah, only daughter of Mr. I. Philpot, of St. Swithin's Lane.

OBITUARY.

On Sunday, the 1st inst. in his 65th year, at his house in John Street, America Square, much lamented by his family and numerous friends, Joseph Hart Myers, M.D. who fell a sacrifice to the continued torments and consequent exhaustion of that opprobrium medicorum, the gout.

MEDICAL AGENCY OFFICE, (at Cox and Son's, Borough) Two respectable Medical Practices, in the Country, to be disposed of.—For particulars, enquire as above, &c.

TO CORRESPONDENTS.

The communication relative to a recent case of ossific union of the neck of the femur within the capsule, signed "a private Practitioner," is, we are sorry to say, neither sufficiently nor satisfactorily detailed, independent of the anonymous stamp it bears, to induce us to place much confidence on the authenticity of the statement—in another shape we might know better how to appreciate it.

We have received M. M. on Animal Electricity.

The notice signed R. L. came too late for insertion this week. "DUBLINIENSIS" before the receipt of this number will have seen that we have not forgotten him.

We thank "A FRIEND" for his honest observations relative to our past and future labours; and beg to assure him that, ever open to conviction when dressed in the garb of reason, we shall always feel pleasure in availing ourselves to the fullest extent, of suggestions thrown in our way with so much unassuming candour and modesty as those contained among his general remarks.

Dr. B——, is at liberty to act in the manner he proposes:—at the same time, we promise to adhere to the injunction.

Communications, advertisements, &c. &c. addressed for the Editors, at the Publishers, &c.

ERRATUM—*In our last notice to Correspondents read, at the tenth line, (from Scrutator) veritable scurrility, instead of* veritable, scurrilily——E--DY versus RE--CE, &c.

London:

Printed by E. JUSTINS, 41, *Brick Lane, Spitalfields.*

Published by COX and SON, St. Thomas's Street, and 39, High Street, Southwark. Sold also by Sherwood, Neely, and Jones, Paternoster Row; Simpkin and Marshall, Stationers' Court; Callow and Wilson, Princes' Street, Soho; John Cox, Berner's Street, Oxford Street; E. Willson, Corner of Royal Exchange; Chappel, Cornhill; W. Turner, Cheapside; T. Boys, Ludgate Hill; H. and W. Smith, 192, Strand; G. Roake, 31, Strand; W. Sams, St. James' Street; W. Stewart, South Bridge Street, Edinburgh; Hodges and M'Arthur, Dublin; &c. &c.

THE WEEKLY

MEDICO-CHIRURGICAL & PHILOSOPHICAL MAGAZINE.

No. XX.] SATURDAY, JUNE 21, 1823. [*Price 4d.*

" FLORIFERIS, UT APES, IN SALTIBUS OMNIA LIBANT
OMNIA NOS, ITIDEM, DEPASCIMUR AUREA DICTA."

DR. GALL.

OF MORAL GOOD AND EVIL.

THE same regulations which I have just cited, prove that we have always been convinced that man is prone to evil. But does it not appear contradictory that evil should have been created by a being infinitely good? Some, to steer clear of this contradiction, have, in their ignorance, admitted two principles—a good and a wicked being,—which are nearly equal in power and in a state of perpetual warfare. Others have maintained, that all the original qualities of man were given to him for a good purpose; that none of them necessarily lead to evil; and that every thing good in the world may be abused. Eusebius* says with Philo, that matter is not wicked of itself, and is not the immediate cause of evil, which only consists in actions, and the bad use of the original faculties.† Others add, to decide that a thing is evil, it would be necessary to know that which man is ignorant of,—the immense and universal object of the creation. Others in short, not being able to deny the existence of moral evil, account for its origin by free agency. But as soon as free agency is admitted, moral good and evil are presupposed; for what would be free agency, were there not two distinct things, good and evil, between which a free man may choose? Might it not also be objected, that this free agency so much boasted of, since it occasions so much evil, is itself an evil? At the very time that free agency is so loudly extolled, does not man find himself on the very brink of the slippery abyss? It is said, and I say so too, that man abuses his liberty; but what motive has man to abuse it, if nothing inwardly moves or excites him to illegal actions.

I have been bitterly reproached with admitting bad innate inclinations, and propensities to hurtful acts, in man; and my antagonists never fail particularly to remark, that, in these bad propensities are found those of theft and murder. Let the admirers of the excellence of the human species answer me, why, in all times, and in all countries, there have been thieves and murderers; and why neither education, laws, religion, prisons, houses of correction, nor the rack, have yet been able to extirpate these crimes? Would such men then steal and murder for the sole pleasure of exposing themselves to these dangers, without either temptation or inclination? Would they throw the fault upon their ancestors, as if their example had inspired them with these impious propensities? Let them explain then, how the first examples should have taken place,—how infants and little children, who should only have had essentially good dispositions, could, against their nature, become so powerfully disposed to theft and murder.

Whether it be education or nature that furnishes us with these vicious propensities, the difficulty is still the same, as neither is education in the

* Euseb. Præparat. Evang. lib. vii. n. 22.

† Evil is not a substance, and there is nothing bad in it except the abuse which men make of it (St. Augustine, on true Religion.)

power of him who receives it; and education could never develope either good or bad propensities, if the germ of them did not naturally and positively belong to human nature. In vain would you attempt to change a pigeon into an eagle, or an eagle into a pigeon.

Unfortunately it is not theft and murder alone which prove the bad dispositions of men. The just man, has had and will have reason with Moses to complain of the bad actions and dispositions of men. The Lord says, that the malice of the men who lived upon the earth, was extreme, and that all the thoughts and desires of their hearts, in all times, was only wickedness. (Gen. vi. 5.)

Men have always been, and ever will be, prone to all sorts of perverse actions; they have always been besieged, both outwardly and inwardly, with temptations; and they will always be tormented with carnal desires, covetousness, ambition, pride, &c. The world has never ceased, or ever will cease, from being the theatre of every virtue, as well as of every vice, such as lying, calumny, jealousy, envy, avarice, usury, impudicity, revenge, adultery, perjury, rape, incest, idolatry, drunkenness, discord, enmity, injustice, &c.

"A good man out of the good treasure of his heart bringeth forth that which is good; and an evil man out of the evil treasure of his heart bringeth forth that which is evil," (St. Luke vi. 45.) "For out of the heart proceed evil thoughts, murders, adulteries, fornications, thefts, false witness, blasphemies." (St. Matt. xv. 19.) "They are filled with unrighteousness, wickedness, impurity, avarice, malignity; they are invidious, murderers, wranglers, cheats, extremely corrupted in their manners, makers of false reports, calumniators, and hate God in their hearts, proud, haughty, inventors of evil things, disobedient to their parents, without prudence, modesty, or affection for their neighbours, unmerciful." (St. Paul to the Rom. i. 29—31.) "Now the works of the flesh are manifest, which are these; adultery, fornication, uncleanness, lasciviousness, idolatry, witchcraft, hatred, variance, emulations, wrath, strife, seditions, heresies, envyings, murders, drunkenness, revellings, and such like." (St. Paul to the Gal. v. 19—21. "We are born, says St. Gregory, (Hom. iii. 10.) in this world, with our temptations." It is written, (St. Paul to the Rom. iii. 10.) "there is none righteous, no, not one." "The good that I would I do not; but the evil which I would not, that I do. Now if I do that I would not, it is no more I that do it, but sin that dwelleth in me. I find then a law, that, when I would do good, evil is present with me." (St. Paul to the Rom. viii. 19—21.) "But every man is tempted, when he is drawn away of his own lust, and enticed." (St. James i. 14.) *Nulla meus est, nulla anima quæ non recipiat, etiam malarum motus agrestes cogitationum.*" (St. Ambrose, lib. de Noé, &c.) No man can say that he perceives nothing but innocence and virtue in his thoughts and inclinations. Let him who, with his hand on his heart, would contradict me, take up a stone and throw it at me.

So it is in vain that you are humbled with your weakness and imperfection; you must acknowledge the moral as well as the physical evil, and in both you must equally submit to the incomprehensible decrees of the Creator. Both exist, not, as some assert, because God permits it, for a similar condition would suppose on the one hand a pure chance, on the other want of power in the Creator; but they exist because they come within the plan of the eternal Providence. In the same manner as the temporal blessings are unequally distributed, and without any exception of persons, so are the physical evils, which frequently happen, without

any fault being attributable to him who is afflicted with them. Is there not a continual opposition throughout the whole of nature's works? The air, land, and water, do they not present a scene of perpetual destruction, production, pleasure, and pain? What have animals done for men to whom they render the most useful services? If parents have begotten their children in the height of debauch, why should the latter expiate the faults of the former? When the storm devastates the harvest of the rich and indolent, does it spare the poor and laborious husbandman? "The just man perisheth notwithstanding his justice, and the wicked man liveth a long time notwithstanding his wickedness." All *things come* alike to all: there is one event to the righteous and to the wicked; to the good and to the clean, and to the unclean; to him that sacrificeth and to him that sacrificeth not: as *is* the good *so is* the sinner; *and* he that sweareth, as he that feareth an oath. This *is* an evil among all *things* that are done under the sun, and there is one event unto all: yea, also the hearts of the sons of men are full of evil, and madness is in their heart while they live, and after that they go to the dead." (Ecclesiastes ix. 2 and 3.) "I returned, and saw under the sun, that the race is not to the swift, nor the battle to the strong, neither yet bread to the wise, nor yet riches to men of understanding, nor yet favour to men of skill; but time and chance happeneth to them all. For man also knoweth not his time; as the fishes that are taken in an evil net, and as the birds that are caught in the snare; so are the sons of men snared in an evil time, when it falleth suddenly upon them." (Eccles. ix. 11, 12.)

I have just said that bad dispositions and perverse inclinations enter into the plan of eternal Providence. What, in fact, would those who erect themselves into apologists, say of future virtue and happiness, if it were demonstrated to them, that, without a propensity to evil, there would be neither virtue, reward nor punishment? For, as we have already said, what would liberty be called, were it not wished to designate, by this expression, the faculty of choosing between good and evil. If man had only propensities for good, where would the possibility be of doing evil? And, without this possibility, on what could the idea of vice or virtue, the worthiness or unworthiness of actions be established? He who does no evil, because nothing invites him to it, is certainly worthy of envy; but he can neither pretend to the virtue nor the merit consequent upon good actions.*

What will be the chastity of those whom Jesus Christ has said came forth eunuchs out of the womb of their mother? Why should self-denial be so much boasted of, when it does not suppose hurtful propensities, the subjugation of which did not depend on ourselves?† All the ancient and modern philosophers, Plato, Aristotle, Cicero, Seneca, Pascal, Kant, as well as the fathers of the church, have founded the notion of virtue on the victory we gain over our vicious propensities.‡ The old man who has

* Non virtus est, non posse peccare. Cum renunciatur improbitati, statim adciscitur virtus. Egressus enim malitiæ virtutis operatur ingressum. *S. Ambrosius.* Posse peccare datum est primo homini, non ut proindi peccaret, sed ut gloriosor appareret, si non peccaret, quum peccare posset. *S. Bernardus, de libero arbit.*

† Castitas est virtus sub jugo rationis impetum libidinis refrenans. *S. Augustinus de finibus.*

‡ Vita nostra in hac peregrenatione non potest esse sine peccato, sine tentatione: quia profectus noster per tentationem nostram fit, nec sibi quisquam innotescit, nisi tentatus; nec potest coronari, nisi vicerit; nec potest vincere, nisi certaverit; nec potest certare, nisi inimicum et tentationes habuerit. *S. August, super Psalm,* 60. Caro si sale non aspergatur, quamvis sit sana et præcipua, corrum-

passed his youth in dissipation, can he be called continent and moderate, because his desires have abandoned him?* It is precisely then the evil propensities that many people believe to be incompatible with the glory of God, with the nobleness of man and the welfare of society, which give the possibility to man of being either vicious or virtuous; it is only by these means that actions can be worthy or unworthy, and whoever wishes to extinguish in man the belief for perverse inclinations, will also extinguish in him the fear of punishments and the hope of future rewards.

Exalted propensity to kill, weakening the moral liberty.

There is an inclination in man that gradually increases, from the simple indifference manifested at seeing animals suffer, and the simple pleasure of seeing them killed, to the most impetuous desire of killing. Sensibility repels this doctrine, yet it is but too true. Whoever wishes conveniently to judge the phenomena of nature, should possess the courage to acknowledge things as they are, and not generally to make man better than he actually is.

---

pitu; ita et anima nisi tentationibus assiduis saliatur, continuo resolvitur et relaxatur. *Origenes, super lib. arb. et S. Chrysostomus, Hom. IV. de pœnitentia.*

Nulla sine labore virtus est. S. Ambros, in Psalm, 118. Non est gloriosa victoria, nisi ubi fuerint gloriosa certamina. *S. Ambrosius de off.* Nulla sunt sine tentationum experimentis opera virtutis; nulla sine perturbationibus fides, nullum sine hoste certamen, ulla sine congressione victoria. Leo, sermo 35,—&c.

* Quidam in juvente luxuriose viventes, in senectute continentes fieri delectantur et tunc elegunt servire castitati, quando libido eos servos habere contempsit. Nequaquam in senectute continentes vocandi sunt qui in juvente luxuriose vixerunt; tales non habent præmium, quia laboris certamen nor habuerunt; eos enim exspectat gloria, in quibus fuerunt gloriosa certamina. *Isidor, de summo bono, lib.* 1. *c.* 31.

It is observed that, equally in children as in grown up persons, among vulgar men and those who have received an education, some are sensible and others are indifferent to the sufferings of other people. Some even feel a pleasure in tormenting animals, in seeing them tortured and killed, without charging it either to habit or a bad education. I could mention several instances where this inclination, when it was very strong, has decided certain individuals in the choice of their calling. It was thus that a student frequently frightened his school-fellows, by tormenting insects, birds, and other animals. It was, he said, to satisfy his inclination that he studed surgery. An apothecary's boy had such a violent inclination for killing that he became an executioner. A merchant's son, who also made his happiness to consist in killing, embraced the calling of a butcher. A rich Dutchman, paid the butchers who had contracted to supply the shipping with meat, to let him knock down the bullocks.

The existence of this propensity and its diversity may likewise be estimated by the impression which a public execution makes upon the spectators. Some cannot bear such a sight; others pursue it as a pleasure. Sir George Selwin, on these occasions always endeavoured to be as near the criminal as possible. A story is told of Condamine that, one day endeavouring to get through the mob assembled at the place of execution, and the soldiers having pushed him back, the executioner said to them "let that gentleman pass, he is an amateur." M. Bruggmans, a professor at Leyden, mentioned a Dutch clergyman to us who had such a decided desire of seeing killed and of killing, that he took the situation of almoner of a regiment, solely that he might have an opportunity of seeing a great number of men destroyed. This same clergyman reared the females of several domestic animals

and, when they brought forth their young, his favourite occupation was cutting off their heads. He took upon himself to kill all the animals brought to the kitchen. He kept up a correspondence with the executioners of the country, and travelled frequently for days together on foot to assist at executions; the executioners also did him always the honour of placing him on these occasious close to them. In the field of battle striking examples are also found of the different degrees of energy in this disposition. One soldier, at the sight of the blood he has spilt, feels intoxicated with carnage; another, moved with pity, directs his arms without aim, or at least spares the conquered, turns aside from a child, a woman, or an old man, and stops of his own accord after the victory.

The man a prey to the cruel propensity in question, still preserves the faculty of subduing it or of giving it a harmless direction. But the power of conquering so vicious a propensity, becomes weaker in an individual, in proportion to the degree of education he has received, or as the organs of the superior order of qualities are less developed. When it happens that this propensity is carried to the highest degree of exaltation, man experiences but very little opposition between his pernicious propensities and his external duties; and, although still in this case he may not be deprived of the moral faculty or liberty of determining according to motives, he finds enjoyment in homicide itself. In this category I shall class all the robbers who, not content with robbing have manifested the sanguinary inclination of tormenting and murdering without necessity. John Rosbeck did not confine himself, like his companions to maltreating his victims to make them confess where their money was hidden, he invented and exercised the most atrocious cruelties, for the sole pleasure of witnessing their sufferings and the blood of children, women, and old men: neither fear nor torments could correct him. His first detention was for nine months; he was shut up in a subterraneous dungeon and so closely, that he was scarcely able to breathe. His feet were loaded with chains; he was up as far as his ancles in stagnant water, and when he was taken out of this sewer, it was only to make him undergo some cruel torture. He nevertheless confessed nothing; he was ultimately set at liberty, and the first use he made of it, was to commit a robbery in the open day. He soon committed fresh murders, and at last was executed. At the beginning of the last century, several murders were committed in Holland, upon the frontiers of the country of Cleves. The author of those crimes was for a length of time unknown. At length an old minstrel who used to go about playing the fiddle at all the weddings in the neighbourhood, was suspected, in consequence of some expressions dropped by his children. When he was brought before the magistrate, he confessed having been guilty of thirty-four murders, and asserted that he had committed them without any cause of enmity, or without any intention to rob, but solely because he experienced an extraordinary pleasure in doing so.

A person named Sabatino, who was condemned to death at Palermo for different crimes, confessed as he was mounting the scaffold, that he had shot a man two years ago from that period. When he was asked what could induce him to commit such an act, he coolly answered, "that he had fired at the man to try if his powder was good." (*Journal de Maires*, Saturday, September 19, 1818.)

Louis the 15th, says M. de Lacretelle, had a strong aversion for a brother of the Duc of Bourbon Condé, the Count de Charolais, a prince who would have re-called the crimes of Nero, had the misfortunes of the people permitted him to occupy

the throne. Even in the games of his childhood, he evinced an instinct of cruelty which was enough to make one shudder. He took delight in torturing animals; his violence towards his servants was ferocious. It is asserted that he was fond of mixing blood with his debauches, and he exercised different kinds of barbarities upon the courtiers that were brought to him. Popular tradition, in accordance with some memoirs, accuses him of several homicides. He committed murders, it is said, without interest, revenge or passion. He fired at some slaters, that he might enjoy the barbarous pleasure of seeing them precipitated from the tops of the houses.

These last facts, fortunately very rare, shew us that this detestable propensity is sometimes independent of education, examples, seduction, or habit, and that it takes its origin solely in a vicious organization. In fact, there are such barbarous crimes committed, or under circumstances so disgusting and revolting, that it would be difficult to account for them in any other way. Prochaska relates a story of a woman at Milan, who enticed children home with her, then killed them, salted their flesh, and every day ate of it. He also gives an example of a man who, in consequence of this atrocious propensity, killed a traveller and a young woman for the purpose of devouring them. I have mentioned the daughter of a man eater, who, from her infancy, brought up at a distance from her unnatural father, participated in this dreadful propensity.

It cannot then be denied, that certain individuals have propensities for crimes, and even those of the most atrocious nature. Even Helvetius, the great antagonist of the innateness of the qualities of the mind and soul, is obliged to agree, "that there are men so unfortunately born, as to find it impossible to be happy but by the commission of deeds that bring them to the gallows." Cardinal Polignac also speaks "of men viciously born, for whom crime has charms, and who are carried away by a furious passion, which obstacles serve to irritate."

Hitherto, nevertheless, the propensities of which I have spoken are not among the number of those which characterize a real alienation of the mind. These propensities call for the most decided measures, and criminals of this class cannot be tolerated in society. Even the greater part, as M. de Sonnenfels expresses himself, should be killed like so many wild beasts to prevent them from destroying men.

It has been objected to me that such men should not be judged according to their organization. No one yet ever had any such pretensions. But it is wished to prove the reality of these facts, and to explain them by this unfortunate organization, that the *voluntary* perversity of these monsters may cease to be accused.

Let us drop this penible subject, and look at the cases where one may with certainty pronounce upon the absence of the moral liberty, consequently upon the impossibility of admitting culpability or any kind of responsibility. Such are those where illegal actions ought to be considered as being committed under the influence of imbecility, under mental alienation, under certain derangements in the condition of the natural health.

I shall be perhaps told, that the acts of simpletons, and those labouring under mental alienation, do not come within the sphere of the criminal laws. But my researches on this object will throw a great light on the preceding discussion; and, on another side, it appears essential to me to determine with the greatest exactitude the circumstances on one of the cases which I am going to point out, as having actually taken place. I shall treat these objects separately.

(To be continued.)

MEMOIR of the late Dr. GORDON.

(Continued from page 282.)

The statement here referred to occurs in pages 37, 38, and 39 of Dr. Spurzheim's pamphlet, and relates to a dissection, made on the 28th December 1816, at which Dr. Spurzheim states himself to have been present among the students as a spectator. He asserts, that, after the cranium was removed, the diseased appearances of the parts within were not exhibited to the spectators. He insinuates, that the dissectors in the area purposely surrounded the body, so that no one could see what was doing except themselves; and that when a gentleman moved sidewards to give him (Dr. S.) at least a distant view, Dr. Gordon intentionally placed himself in the opening just before him. He adds, 'that he had never seen a public 'dissection made with less advantage 'and less instruetion to the pupils:' And while he acquits all others of blame on this occasion, he points to Dr. Gordon as alone concerned 'in pre-'venting this case from receiving its 'proper publicity.'

This statement deviates so widely from what was either done or intended on the occasion referred to, that it required no common skill in the art of misrepresentation to contrive it, and still more uncommon hardihood in asscrtion to set it down for truth. The mistakes—to give them not a harsher name—into which Dr. Spurzheim had fallen, were pointed out to him by Mr. Joseph Bell, the Colleague of Dr. Gordon in the Infirmary, whose duty it had been to direct the dissection in question. Among Dr. Gordon's papers, I find also a 'Statement' of circumstances relative to this dissection, drawn up by himself, and submitted to the senior surgeons of the Royal Infirmary, in refutation of the charges and calumnies against himself and his colleagues, contained in Dr. Spurzheim's pamphlet. After stating that the dissection was performed by Mr. Joseph Bell with the greatest care, every part of the organ being minutely examined, the whole of it carefully weighed, and the contents of the ventricles exactly measured; that Mr. Bell, to gratify the laudable curiosity of the gentlemen attending, actually handed round among them the scull-cap, and portions of the diseased cerebellum; and that, on the following day, a very clear, accurate, and concise Report of the dissection, drawn up by Mr. Bell and his clerk, was presented to Dr. Duncan, senior, the Clinical Professor —Dr. Gordon thus proceeds,—'Such 'being the facts relative to this dis-'section, it was with equal indignation 'and surprise that I read the account 'of it which was soon after introduced 'by Dr. Spurzheim into a pamphlet 'published by him in this place. In 'that pamphlet, it was affirmed, that 'the individuals performing and assist-'ing in the operation, intentionally con-'ducted themselves in sueh a manner 'as to conceal the morbid appearances 'which presented themselves from the 'whole of the spectators, and, in par-'ticular, from the author of the pam-'phlet himself, who states that, on that 'occasion, he had placed himself among 'the students in the Theatre. I feel 'perfectly confident, that there is no 'one who knows either Mr. Joseph 'Bell or myself, who will for a moment 'suppose that either of us is capable 'of sueh conduct as is here attributed 'to us. Nothing can be more false 'than Dr. Spurzheim's aceusation. The 'very presence of that person among 'the other spectators was wholly un-'known both to Mr. Bell and myself; 'but had it been otherwise, I am very 'certain that no one would suspect that 'either of us would have been so far 'regardless of our own dignity, as to 'permit such a circumstance to in-'fluence us in the diseharge of our 'public duty.

'Fully sensible how much the re-'putation of the Royal Infirmary was 'involved in the statement of this dis-'section, presented to the public by Dr. 'Spurzheim, Professor Russel took the 'earliest opportunity of contradicting 'it in his Clinical Lectures. Mr. Bell 'also, did not fail to remonstrate with 'the author of the pamphlet himself 'on the subject; and having occasion, 'a short time after, to treat of hydro-'cephalus in my Lectures, I felt myself 'called upon, from a regard to the 'character of the Infirmary and of my 'colleague, as well as with a view to 'repel the insinuations thrown out 'against myself, to pronounce the state-'ment in question, in the most positive 'manner, to be false.'

To this statement of Dr. Gordon, I shall add, with permission, that of Mr. Bell himself, drawn up, like the former, for the information of the senior surgeons, and addressed to James Law, Esq.

St. Andrew's Square, 14th March, 1817.

Dear Sir,—'In compliance with your 'request, and with that of the other 'surgeons of the Royal Infirmary, I 'subjoin the following statement of 'what took place on the 28th of De-'cember last, at the dissection of a girl 'who died of hydrocephalus.

'The dissection was conducted in the 'usual manner. No observations were 'addressed to the students, except 'when, on their showing some marks 'of dissatisfaction, Dr. Gordon re-'quested them to be silent, and said 'that they should be afterwards in-'formed of the particulars. The number 'of individuals in the area amounted 'probably to twelve or fifteen, and per-'haps I was not sufficiently careful to 'prevent the view of the students (in 'the theatre) from being obstructed: 'but I consider it almost unnecessary 'to say, that no intentional obstruction 'was interposed.

'The scull-cap and a portion of the 'diseased cerebellum were handed 'round for the inspection of the stu-'dents; and if a minute examination 'of any other parts had appeared to 'me likely to afford information, I 'should have directed them to be 'handed round likewise; yet I would 'not be understood as admitting, that 'this is a practice which ought inva-'riably to be followed.

'A detailed account of the appear-'ances was delivered on the following 'day, to the Clinical Professor; and the 'Journal being open to the students, 'constitutes, in my opinion, the legiti-'mate mode in which they may satisfy 'themselves, as to every particular of 'the dissection.

'In a conversation with Dr. Spurz-'heim, which I brought on for the 'purpose of obtaining an explanation, 'he instantly assured me, that the re-'marks which he had published re-'specting this dissection, had no refer-'ence to me: and on my informing him, 'that demonstrations were not usually 'given, but that regular accounts of 'the dissections were inserted in the 'Journals for the information of the 'students, he said, that, had he been 'aware of these circumstances, he 'would not have made the observation 'contained in the 39th page of his 'pamphlet;'—"that he (Dr. Spurz-"heim) had never seen a public dis-"section made with less advantage and "less instruction to the Pupils."—Joseph Bell.

(To be continued.)

SYSTEMS ON DIGESTION.

From the second vol. of MAJENDIE'S PHYSIOLOGY, *now in the press.*

We are ignorant of the chemical changes which the aliments undergo in the stomach. It is only at different times that explanations on this subject more or less plausible have been attempted to be given. Ancient philosophers have asserted that the food putrified in the stomach; Hippocrates attributes digestion to *coction;* Galen gave *attractive, retentive, concoctive* and *expulsative* faculties to the stomach; by the assistance of which he thought to explain the process of digestion. The doctrine of Galen prevailed in the schools until the middle of the seventeenth century, when it was attacked and upset by the fermenting chemists, who established a particular *effervescence* and fermentation in the stomach, by means of which the aliments were macerated, dissolved, precipitated, &c. This system had a very short career; but was superseded by ideas much less consonant with reason. It was afterwards established, that digestion was nothing more than a *trituration* or bruising of the food effected by the contraction of the stomach; and it was supposed that an innumerable multitude of small worms attacked and divided it.—Boerrhaave conceived he had hit the truth by combining the different opinions on this subject that reigned before him. Haller differed from the ideas of his master, by consider-

ing digestion merely as a simple *maceration*. He was aware that vegetable and animal matter steeped in water was not long before it was covered over with a soft and homogenous membrane; and he thought that the aliment underwent phenomena analogous to this, by macerating in the saliva and fluid secreted by the stomach.

Experiments of Reaumur and Spallanzani relative to the formation of Chyme.—If the harsh logic which hereafter ought only to reign in physiology be applied to the preceding systems, nothing further can be deduced from them than being the effect of that pruriency evinced by man in endeavouring to satisfy his imagination, and of making allusion to things of which he is completely ignorant. In fine, were we more advanced in our knowledge of the process of digestion by having said that it was carried on by means of coction, fermentation, maceration, &c.? No—since no precise meaning whatever has been attached to these words.

It was not by following these methods that Reaumur and Spallanzani proceeded. They made experiments upon animals, and demonstrated the falsity of the ancient systems; they showed that aliments, enclosed in hollow metallic balls, pierced with small holes, were digested equally as if they were at liberty in the cavity of the stomach. They proved that the stomach contains a particular fluid, which they called *gastric juice*, and that this fluid was the principal agent in digestion; the properties of which, nevertheless, they considerably exaggerated, and they were no less led into error when they imagined they had explained the digestive process as a *dissolution;* for, in not explaining this, they explained still less the alteration of the aliments in the stomach.

Instead, therefore, of arresting the attention of our readers by the easy exposition and refutation of these different hypotheses, and which may equally be found in every work on the subject, we shall offer the following reflexions respecting the phenomenon of the formation of chyme.

In the formation of chyme, the following must be borne in mind: 1st. the circumstances under which the aliment contained in the stomach is found. 2nd. The chemical nature of these substances.

Reflexions on the formation of Chyme.—Among the circumstances in which the aliments are formed throughout the whole continuance of their stay in the stomach, are not very numerous. 1st. They suffer more or less of pressure, either from the parietes of the abdomen or from those of the stomach. 2nd. The whole mass is moved by the act of respiration. 3rd. They are exposed to a temperature of from 30° to 32° of Reaumur. 4th. They are exposed to the action of the saliva and mucu-lencies coming from the mouth and œsophagus, as well as to the fluid secreted by the mucous membrane of the stomach.

It should be recollected that this fluid is of a slightly viscid nature, that it contains a great deal of water mucus, salts having soda and ammonia for their base, and the lactic acid of M. Berzeleus.

With respect to the nature of the aliments, we have already seen how it varies, since all the immediate principles, animal or vegetable, may, under different forms or proportions, be carried into the stomach and serve usefully to the formation of chyme.

Can we now, by taking into consideration the nature of the aliments and the circumstances in which they are placed in the stomach, go so far as to account for the known phenomenon of the formation of chyme?

The temperature of from 30° to 32°, the pressure and tossing about to which the aliments are subjected, cannot be considered as principal

causes of the transformation into chyme; it is probable that they only co-operate, with the exception of the action of the saliva and the fluid secreted in the stomach; but, from the known composition of the saliva, it is scarcely possible that it attacks and changes the nature of the aliments; at most, it can be of no use in dividing and imbibing them, so as to separate their molecules: it is then the action of the fluid formed by the internal membrane of the stomach at which we must stop. It appears certain that it is this fluid, acting chemically upon the alimentary substances, which dissolves them from the surface towards the centre.

Artificial Digestion.—To give a palpable proof of this, it has been attempted, with the fluid we are speaking of, to promote what, since the time of Reaumur and Spallanzani, have been physiologically called *artificial digestions*, i. e. after having masticated some aliment, they are mixed with gastric juice, and afterwards exposed in a tube or vase at a temperature equal to that of the stomach. Spallanzani has asserted that these digestions have succeeded, and that the aliment was reduced to chyme; but, from the late investigations of M. de Montegre, it appears positive they cannot; and that on the contrary, the substances employed undergo no alteration analogous with chymification; which agrees exactly with some experiments made by Reaumur.

But respecting the gastric juice not dissolving the aliments shut up with it in a tube, it must not be concluded, as some have done, that the same fluid cannot dissolve the aliments when they are thrown into the stomach. The circumstances, in this case, are widely different; as in the stomach the temperature is equal, the aliments are pressed and agitated, the saliva and gastric juice are continually being renewed; and in proportion as the chyme is formed, it is carried and driven into the duodenum. Nothing of this kind takes place in the tube or vase containing the aliments mixed with the gastric juice; consequently the failure of artificial digestion proves nothing in explaining the formation of chyme.

But how does it happen that the same kind of fluid is capable of acting in an analogous manner, upon the great number of alimentary substances, vegetable or animal. The acidity characterizing it, qualified to dissolve certain aliments, the albuminous, for example, would be proper for dissolving one of a fatty nature.

To this it may be replied that nothing affirms the gastric juice to be always the same: the small number of analyses that have been made of it proves, on the contrary, that it presents considerable varieties in its properties. It is not impossible that the contact of different kinds of aliment upon the mucous membrane of the stomach may have some influence over its composition; at least, we are certain, that it varies in different animals. In man, for instance, it is incapable of attacking the texture of bones; which every one knows, are easily digested by dogs.

The action, in general, which forms the chyme prevents the reaction of the elementary constituents of the aliments upon each other; but this effect only takes place in *good* digestions; it appears that in *bad*, fermentation, or even putrefaction may take place; this may with probability be supposed from the great quantity of inodorous gas extricated in certain cases, and from the sulfurated hydrogen that is disengaged in others.

Influence of the eighth pair of nerves over the formation of Chyme.—For a length of time the nerves belonging to the eighth pair have been considered as intended to preside over the process of chymification: in fact, if these nerves be tied or cut in the neck, the matter con-

veyed into the stomach undergoes no alteration. But the consequence deduced from this circumstance does not appear to me to be strictly correct.

Might not the effect produced by the lesion of respiration be confounded with the direct influence of the section of these nerves upon this organ? I am induced to believe so; for if, as I have frequently done, the two eighth pairs be divided in the chest, below the branches going to the lungs, the aliments that are afterwards introduced into the stomach are there converted into chyme, and ultimately furnish an abundant supply of chyle.

It is suspected by some, that electricity might take an active part in the production of chyme, and that the nerves in question might be made the conductors of it; although no positive fact justifies such a conjecture. A more probable use assigned to the nerves of the eighth pair is to establish intimate relations between the stomach and brain, to inform it of any hurtful substance that may have got in amongst the aliments, and if these are of a digestible nature.

Internal sensations accompanying the formation of Chyme.—In robust people chymification is performed without their knowledge; they merely perceive that the sensation of plenitude and difficulty of breathing, produced by the distension of the stomach, disappear by degrees. But it frequently happens, more especially in people of delicate complexions, that digestion is attended with feebleness in the action of the senses, with a general sensation of cold and slight shivering: the understanding itself is diminished in activity, and seems benumbed with a disposition. It is then said that the vital power is concentrated in the acting organ, and that it momentarily abandons the others. To these general effects are added, the production of gas that escapes by the mouth, a sense of weight, twisting, and at other times a burning heat, followed by a similar sensation along the course of the œsophagus, &c. These symptoms are felt particularly towards the end of chymification. It does not however appear that these *laborious digestions* are much more unprofitable than others.

Case of Congenital Dropsy of the left Ventricle of the Brain, giving rise to a Tumour on the Head analogous to Spina Bifida. By W. C. Dendy, *Esq. Surgeon to the Royal Universal Dispensary for the Diseases of Children.*

A boy, ten weeks old, was presented at the Dispensary for the Diseases of Children, in June, 1821, with a diaphanous tumour on the left side of the head. The mother reported the labour to have been natural, and the child's general health to have been apparently good for the first eight days, after which it began to exhibit symptoms of constitutional derangement: an aphthous eruption appeared in the mouth, the bowels were disordered, and discharged frequently green, liquid fæces: emaciation supervened, but it still continued to suck well, and the stomach did not seem much deranged.

At the time of my first seeing the child, small doses of calomel and the cretaceous powder had, in some degree, improved the appearance of the stools. The emaciation, however, continued, and the tumour rapidly increased in size. Considering that no method of cure, by internal remedies, could be employed with any hope of success, I resolved to adopt the plan introduced by Sir Astley Cooper into the treatment of spina bifida, and put in practice, in a similar case to the present, by Mr. Earle. I accordingly punctured the tumour, which, at this time, measured upwards of six inches in circumference, four and a half at its long, and three and a half inches at its short diameter. A small portion of its contents

was evacuated. No epileptic symptom supervened on pressure. Puncture of the tumour was thrice performed, in the space of nine days, and about eight ounces of water removed at the three operations. No unpleasant symptom supervened until some hours after the last performance of puncture, when the child appeared slightly convulsed. It died on the following day, which was the tenth from the first operation.

Dissection.—On dividing the integuments over the tumour, the coronal, lambdoidal, and squamous sutures, were seen nearly united by cartilage. The left parietal bone was nearly divided in two by a wide opening of about two inches in length, and half an inch in width. Around this cleft the pericranium was lined with a membrane, forming the internal paries of the tumour, which was considered to be the dura mater protruded by the effused fluid which it contained. The edges of this cleft were cartilaginous, ossification not having advanced farther than the central portions of the halves of the parietal bone, into which halves the effused and protruded fluid had divided it. Cellular bands crossed the parietal opening at both its ends, and firmly connected its edges. On looking through this cleft, a considerable portion of the cerebrum appeared to be wanting. On removing the parietal bone and the left hemisphere of the brain, the ventricle of that side was exposed, and the communication between it and the external tumour, through its ceiling, part of which was wanting, was readily seen in that direction. Owing to the deficiency of the cerebral substance in this situation, the ventricle and tumour formed one cavity, which, instead of the usually delicate membrane of the ventricle, presented a layer of lymph, into which vessels were seen to ramify. The substance of the brain around this membrane was softer than usual. On the plexus choroides there was a small tumour, apparently arising from a varicose state of vessels, about the size of a shot. The thorax and abdomen were not opened.

Remarks.—In this case, the fluid seems to have been deposited in the left ventricle before the period of the formation of the great cerebral lobes, and at the time when the parts situated towards the base, &c. of the brain were undergoing the formative process; and as these parts became more fully developed, they pressed the fluid contained in the ventricle outwardly, and thus prevented the ceiling of the ventricle and the part of the parietal bone directly over it to be formed. The integuments were, however, fully produced, because we find, if we attend to the progressive developement of the cranium and its contents, that the integuments are fully formed, and even the cartilaginous nidus for the production of the bones are, in several parts, produced before the brain, and especially its hemispheres, are developed. As the fluid accumulated, in this stage of fœtal existence, and as it was protruded externally by the formation of the parts of the brain beneath, and on each side of it, and by the more unyielding state of the cranium towards the base, not only were the parts which had not been previously formed, and which, under the usual circumstances, are placed above the fluid effused in the ventricle, prevented from being produced, but, as the fluid became protruded, it carried along with it the membrane containing it, lining the ventricle, and also the dura mater, both which membranes became the internal coverings to the opening in the parietal bone, and to the external tumour. The inflamed appearance of the internal membrane doubtless arose from inflammation supervening in it after the first puncture: the softened state of the brain surrounding the membrane and the lymph which covered

it evince that such was the case. The cartilaginous edges of the opening through the parietal bone show that the protusion of the effused fluid was previous to the commencement of ossification in that bone. The structural derangement in this case was exactly of the same nature as that which has usually obtained the name of spina bifida. The only difference was in its situation.

Great Eastcheap, March 10, 1823.

TUMOUR IN THE VENA CAVA.*

J. C. a native of the West Indies, aged 26 years, was admitted into the Pennsylvania Hospital on the 13th August, 1819, with a scirrhous testicle combined with hydrocele, for which he underwent operations. An enlargement then took place in the direction of the spermatic chord, and next the abdomen swelled and reached a great size, with lancinating pains, and constipation, from pressure on the intestinal tube. A mercurial course gave remarkable but only temporary relief. On the 7th of April, 1820, he died, "having all the appearances of internal scirrhus."

"On opening the body, an enormous tumour was found adhering to the peritoneum on the right side, and enveloping to at least one half their width, and with the firmest adhesions, the cœcum and parts of the colon and ileum, on the same side. A process of the same mass extended into the pelvis, included the rectum in the same manner, and adhered intimately to the urinary bladder. Another lobe of the tumour lay higher and deeper, and included the right kidney so completely, that it could not, at first, be seen. A large fleshy process extended upwards, separated the duodenum several inches from the spine, adhered to the vena cava, embraced the whole circumference of the aorta, and finally became continuous with the diseased substance which formed nearly the whole of what appeared to be the liver. At the posterior part of the tumour was found the enlarged spermatic chord, extending to the place at which it had been tied, during life, and forming a blunt projection there, which had been felt externally. Its composition was similar to that of the rest of the tumour.

"The whole presented the mixture of cartilaginous bands with cells of softer matter, which occurs in scirrhus; occasionally with coagula of blood, and in the liver, with several small abscesses. The right kidney was very much enlarged from distention of the pelvis and infundibula which were filled with urine. The internal and tubular portion of this viscus was nearly removed. The ureter was of the usual size, but the passage of fluids through it was rendered difficult by sudden and acute turns. The other kidney was healthy. Much bloody fluid was found in the abdomen and the left side of the thorax. There is no memorandum of the right side."

The vena cava inferior was distended to an enormous size, by a kind of polypus tumour, four and a half inches in length, and nine-tenths of an inch in thickness, tapering gradually to both ends; but adherent in some places to the parietes of the vessel.

We consider the phenomenon which has given title to this paper in our respected contemporary of the West, as quite a subordinate one in the series of morbid structures, and very doubtful as to its antomortem or post-mortem formation.-*(Med. Chir. Rev.)*

Dr. GALL's *Second Dissection of the Brain.*

On Sunday last, Dr. Gall dissected the brain for the second time since he came to town, at Mr. Carpue's theatre, Dean Street, Soho, in the

* Dr. Coates.—Dr. Chapman's Philadelphia Journal, No. 8.

presence of a distinguished number of the profession, who appeared wonderfully gratified with the demonstrations, which he made apparent to every eye; in fact, his knowledge and ingenuity in dissecting and developing the most important structure of the human body, met with decided approbation and consent. In the course of these demonstrations he traced the fifth pair of nerves to the corpora olivaria, also the origin and decussation of the optic nerves. The origin of the olfactory, he observed, had not hitherto been demonstrated, there were three roots whose origin he had not yet discovered. To be brief; he developed his method of examining the structure of the nervous systems: and pointed out the necessity of admitting as many origins as there are various nervous masses; he also remarked upon the grey and white substance in the nervous system and their relation.. The former, he stated, to be a secretion of the blood-vessels from which filaments are produced: and that it is in the final expansion (epanouissement) of the nerves that the function makes itself known—that the direction of the blood-vessels accompany the nervous filaments:—there were two nervous systems—one for sensation and the other for voluntary motion—that, according to Sœmmering, the nerves are much greater at their peripheric than at their centrical termination.

Dr. Gall next proceeded to point out the direction of the nerves of the spinal marrow, by which he proves them not to be prolongations of the brain—also that one pair of nerves is not the prolongation of another. The direction of the pretended cerebral nerves, he satisfactorily demonstrated, were evidently from below upward; and that every pair of the spinal nerves is composed of different bundles, several of which, in animals, he observed, have their direction from below, upward or outward; others from above, downward and outward:—in alluding to the cerebellum, he further observed, that in animals where this organ was not found, the pons varolii was also wanting. The Doctor concluded his demonstrations by unfolding the convolutions of the brain and spreading it out upon the table, &c.

MELANGE.

Irritability of the Tongue.—The following account is from the pen of Blumenbach:

I had the tongue of a four-year-old ox, which had been killed in the common way, by opening the large vessels of the neck, cut out in my presence, while yet warm, and at the same time the heart, in order that I might compare the oscillatory motion of this organ (which is by far the most irritable that we are acquainted with,) with the motion of the tongue. And, when I excited both viscera at the same time by the same mechanical stimuli,—namely, incisions of a knife and pricks of a needle,—the divided tongue appeared to all the bystanders to survive the heart by more than seven minutes, and to retain the oscillations of its fibres altogether for a quarter of an hour; and so vivid were the movements when I cut across the forepart of the tongue, that the butcher's wife compared them to those of an eel in a similar condition, quite in the way that Ovid has compared them to the motions of the tail of a mutilated snake.

To these observations made upon animals, I may add here a similar one made upon the human tongue itself, the knowledge of which I owe to my excellent friend and much respected colleague, Reimar.

A boy in Hamburgh, who was severely affected with epilepsy, bit the forepart of his tongue in a violent paroxysm, in such a manner that it adhered only by a thin slip. This segment, therefore, as being not only useless but very inconvenient to the patient, it was immediately judged necessary to cut off: and when the physician, the illustrious Chaupefié, placed it upon his hand, he was surprised to see it palpitate strongly. In order, however, to guard against all deception, as the motion might have depended upon the action of the muscles of his hand, he placed the bit of tongue in the bottom of a window, and even then it continued to move for several minutes, insomuch that it even seemed, as all the bystanders testified with one accord, to change place a little, and creep forward. External stimuli, the prick of a

needle, or the application of salt, also excited similar motion; scarcely, however differing in any way from the spontaneous ones.

I am therefore much mistaken if the muscular substance of the tongue is not possessed of a remarkable degree of irritability; and Ovid has described its phenomena with exquisite precision.—*(Edinburgh Phil. Journal.)*

On the Xanthoöpia of Jaundiced Persons.—The rarer xanthoöpia, as it may be called, of jaundiced persons, (says M. Blumenbach,) seems to be in this condition, that it supposes at first a yellowish tinge in the pellucid media which transmit the rays of light, especially of the aqueous humour and crystalline lens: then a not so gentle, but more sudden, attack or increase of the disease; and, lastly, both a vivid perception in the sensorium and application of the mind. But, as these seldom happen at once in icterus, we can easily comprehend why very few patients in that disease complain of the yellow tint of objects. On the contrary, I knew a lady of excellent talents and accomplishments, who, on a sudden and severe attack of icterus, saw at first linen of all kinds, towels, &c. of a livid or dusky hue, and as if they had been ill washed, or not properly bleached. But those upon whom the disease seizes slowly, advancing as it were step by step, no more experience this yellow hue of objects than old people do, in whom we have known the crystalline lens become livid in very advanced age. Should this tinge take place in one eye only, the other remaining uncontaminated, that diversity of colour in white and shining objects would be no less easy of observation, than in patients who, after depression of cataract, see the objects, from the use of sulphate of copper applied to the diseased eye, on which they look with it, of a colour sometimes verging towards blue. And a somewhat similar vitation of sight is known to take place in those who have for a long time kept one eye applied to dioptrical instruments. Thus the celebrated philosopher James Rohault, after looking, without interruption, for twelve hours at a distant battle, by means of a telescope, from that time forth saw every object with his right eye, which he had here fatigued so much, of a different colour from what it had when viewed with the left. And the same circumstance happened to myself, after being assiduously employed for several days, in making observations with a compound microscope.—*(Edinb. Phil. Journal.)*

Extraction of Stones from the Bladder.—M. Campana, considering urinary calculi in relation only to the shape, divides them into three classes,—spherical, flat or irregular, and oval. The first have only one diameter; the second have two, a great and a smaller diameter; whilst the third class has three,—a great, a middle, and a small one. In the first case, they can only be laid hold of by the forceps in one way; in the second class, he recommends them to be laid hold of by their large diameter; and the third class, by the middle one. If lithotomists have often varied their method of opening the bladder, says M. Campana, this has not been the case with respect to the removal of the stone; for all operators, to the present day, have agreed that the stone should be laid hold of by its smallest diameter: nevertheless, when taken hold of in this manner, it presents inconveniences which are not met with when it is taken hold of by the large diameter. The first of these inconveniences is, that, the large diameter being out of the forceps, the stone touches and wounds with its asperites the internal membrane of the bladder, which does not happen if the case be reversed; for then the smooth surface of the blades of the forceps facilitates the dilatation of the opening, without offending the parts. The second inconvenience is still greater, and is produced by the angles formed by the grasping portion of the forceps, which are applied directly to the membranous circle of the sphincter of the bladder, and which makes the extraction of the stone impossible; or, at least, renders the tearing of the neck of the bladder inevitable, the consequences of which are fatal. The difficulties and danger are increased by the contraction of the bladder, stimulated by the contact of the forceps and the calculus; and it is easily conceived what mischief may ensue in extracting the stone under such circumstances All this is avoided by laying hold of the stone by its greatest diameter. It is true that by this method the forceps is much more open, which requires that the opening into the bladder should be more dilated; but this dilatation, says M. Campana, is readily obtained when the bladder contracts not upon the stone, nor upon the angles of the forceps, but merely upon their smooth back. They then act only as simple dilators, in a similar way to the forceps in the extraction of the fœtus. M. Campana proves the superiority of this plan by the operations he has himself performed, and relates the case of a youth, aged sixteen, who was cured in twenty-nine days without the slightest accident, from whose bladder he extracted a stone, the large diameter of which was two inches.—*(Annali Univ.)*

New Method of Preparing Nitric Ether,

by M. Durozier.—Struck with the difficulty of succeeding by the methods in use, and, above all, with the inconvenience resulting from the application of heat in this preparation, M. Durozier conceived that, in developing the degree of heat requisite for the re-action of the acid on the alcohol, by their simple admixture, this process might be attended with more certainty. Sulphuric acid appeared to him most proper for this purpose. Again, wishing to get rid of the complicated apparatus of Wolfe, he employed the common means of distillation which are to be found in every laboratory. He placed a tubulated retort, containing about six pints, in a sand bath, the neck entered directly into a serpentine tube, to the other end of which was adapted a receiver, placed in a vessel fitted to keep it cool. At the superior part of the receiver was a safety-tube, communicating with a flask containing a little alcohol, for the purpose of absorbing any ether which might escape. The apparatus being thus arranged, he took three pounds of alcohol at 36°, and mixed with it one pound eight ounces of nitric acid at 32°. (This mixture was made the evening before.) The whole was introduced into the retort, and immediately after he poured twelve ounces of concentrated sulphuric acid upon it: the tube was adapted and secured with lute. Five minutes after the introduction of the sulphuric acid, ebullition became manifest; streaks of ether marked the sides of the retort; and soon after it flowed abundantly from the inferior extremity of the tube. When the ebullition had ceased, he removed the contents of the receiver, and found it to weigh twenty-three ounces; he then agitated it with an equal quantity of water, and, after standing for a moment, the ether floated pure and limpid at the top. When separated, it weighed ten ounces three drachms. After this first result, the receiver was again placed, and a very moderate heat applied to the sand bath, so as to distil "a very pleasant and soft nitrous liquor."

On this process a report is made by MM. Faguer and Petroz, who repeated the experiment with much care, and who are assured that by this means "may be obtained, very quickly and with great facility, a much more considerable quantity of nitric ether than by any other known." They object, however, to the method of purification recommended by M. Durozier, as insufficient, and advise that already generally employed.—(*Journal de Pharmacie*, Avril.)

SIR W. BLIZARD'S ORATION.

This day is published, handsomely printed in royal 4to. price 6s.

The HUNTERIAN ORATION; delivered in the Theatre of the Royal College of Surgeons, in London, on the 14th day of February, 1823; by Sir William Blizard, Knt. President of the College, F.R.S. F.A.S. F.R.S. E.D. Soc. R.S.C. Gotting. Corresp. Hon. Prof. of Anat. and Surg. of the Royal College of Surgeons in London, and Surgeon to his Royal Highness the Duke of Gloucester, and to the London Hospital.

Printed for C. and J. Rivington, St. Paul's Church yard, and Waterloo Place, Pall Mall; and sold by T. and G. Underwood, Fleet Street; Callow and Wilson, Princes Street, Soho; and Cox and Son, St. Thomas's Street, Southwark.

TO THE FACULTY.

A Gentleman of highly respectable connexions, who has served his Apprenticeship in one of the first Establishments in the kingdom, and has also attended the different Courses of Lectures and Hospital Practice, connected with his Profession, wishes now to engage himself as an Assistant, with a respectable Member, who would liberally consider his services.

Letters (free of postage) addressed to the care of Mr. Cox, Medical Bookseller, St. Thomas's Street, for G. R. Medicus, will meet attention.

TO CORRESPONDENTS.

*D. M*** and G. R*** are out of our latitude: and, having adverted so lately to the subject of the article from "Londoninesis," we must beg the favour of being allowed to decline it upon the usual terms.*

In reply to the rather whimsical enquiry of L. L. our only answer is "contra vim mortem non est medicamen in hortum."

"DEMOCRITUS," *we suspect, is only* shamming: *he had better reverse the argument, and let us hear from him again.*

If "TYRUNCULUS" *be really at a loss for the information he solicits, we may probably oblige him in our next Number.*

London:

Printed by E. JUSTINS, 41, *Brick Lane, Spitalfields.*

Published by COX and SON, St. Thomas's Street and 39, High Street, Southwark. Sold also by Sherwood, Neely, and Jones, Paternoster Row; Simpkin and Marshall, Stationers' Court; Callow and Wilson, Princes' Street, Soho; John. Cox, Berner's Street, Oxford Street; E. Willson, Corner of Royal Exchange; Chappel, Cornhill; W. Turner, Cheapside; T. Boys, Ludgate Hill; H. and W. Smith, 192, Strand; G. Roake, 31, Strand; W. Sams, St. James' Street; W. Stewart, South Bridge Street, Edinburgh; Hodges and M'Arthur, Dublin; &c. &c.

THE WEEKLY

MEDICO-CHIRURGICAL & PHILOSOPHICAL MAGAZINE.

No. XXI.] SATURDAY, JUNE 28, 1823. [*Price* 4*d*.

"FLORIFERIS, UT APES, IN SALTIBUS OMNIA LIBANT
OMNIA NOS, ITIDEM, DEPASCIMUR AUREA DICTA."

DR. GALL.

How do the primitive and essentially good dispositions degenerate into propensities for evil?

Bad propensities and moral evil are then inherent in human nature, notwithstanding the efforts which certain men think themselves in duty bound to perform to conceal their true origin.

As physiologists, let us examine in what manner the fundamental qualities and faculties of men become bad propensities, and thence the source of moral evil.

The brain, which is the instrument of the moral qualities and intellectual faculties is essentially the same in well-formed men; but the different integrant parts of the brain, or the different organs are not equally developed in every one. The relations of these different developements vary *ad infinitum*. Whence the infinite variety of the moral and intellectual faculties of men.

All the organs in the same individual have not received the same degree of developement; it follows that no man in the same degree possesses every quality and faculty.

The function or the tendency of the activity of an organ is regulated in proportion to its degree of developement or excitement; the function of an organ mediocrately developed no longer resembles itself in the deficiency or in the excess of developement in the same organ. * * * * * * The love of children is one of the first qualities of a mother, but too small a developement of the same organ produces indifference and even hatred of children, and may become one of the causes of infanticide. Too great a developement of this organ is one source of the weakness which fathers and mothers indulge in towards their children. Some of the other sex who have been condemned to celibacy or sterility have even been known to suffer themselves so far to be worked up on this account as to carry off the children of other women. The instinct of self-defence, a quality so necessary, becomes, in its exalted state, courage, the propensity for combat, rashness; in its apathy, on the contrary, it degenerates into timidity and cowardice. No one will say that it is a sin for a man to nourish himself equally with flesh as with vegetables; it is, nevertheless, too great an activity of the same propensity which gradually produces insensibility for the sufferings of others—the pleasure of causing and of seeing suffer—the propensity to destroy, to kill, to burn. The sentiment of property, innate in men and even in animals, will always be one of the first bonds of social order; but give too much energy to the same sentiment, and man will be tempted with the propensity to fraud, usury, corruption, venality, and theft. Love of honour, the source of so many heroic actions, too eager and out of place, courts flattery, luxury, and ostentation. Noble pride degenerates into presumption, insolence, contempt, and despotism. It is in this way that raillery, mockery, sedition, and independence; insubordination, disobedience, obstinacy, credulity, superstition, and idolatry, fix their origin in dispositions primitively

good and essential to the human species.

Qualities and talents particularly distinguished are due to the same origin. It is always a very favourable developement of an organ, an unaccustomed energy of its function that produces the propensity to benevolence, the ideas of religious sentiments, the talent of poetry; without a similar developement, there can be neither great musicians, great painters, great sculptors, nor great orators; every art and science would still remain in an obscure mediocrity.

This then is the explanation most conformable to the nature of man, of the degeneracy and exaltation of his moral and intellectual force, of the origin of vicious and virtuous propensities, of genius and weakness of mind.

It is time now to broach the great question, namely: how is it that man cannot, by any means, arrest the developement of his organs, nor consequently relax the energy of their functions, and be imperiously propelled to do good or evil, are his actions also submitted to the same fatality? or does his organisation permit a voluntary determination? are the actions meritorious or the contrary?

It behoves me to place this subject in its clearest point of view; and as the most important practical consequences result from it, I will treat it with particular candour and attention. May my hearers bring with them the same love of truth that will direct me throughout the whole of this great discussion.

Of Free Agency.

Free agency has ever been the key stone of the greater number of philosophers. Many by dint of reasoning have succeeded in proving that every thing that happens, happens of necessity, and as every action is a consequence of that which has preceded it, as the effect is the necessary consequence of the cause, they have concluded from this necessity, from this relation between cause and effect, that there can be no voluntary act. Others, on the contrary, have made a romance of the nature of man, and by comparing him to the divinity itself, they suppose him an unlimited liberty. Others again think they see a liberty where in reality the shadow of it only exists. A very small number only have considered free agency under its real point of view.

Let too much or too little liberty be granted to man, an injury will still be done to morality, and the judgment we pronounce upon our actions and those of others, will always incline to the wrong side of the question. It is then important to unravel this chaos, and to determine how far reasonable man is in the possession of the power of choosing between such and such an action.

Of Unlimited Liberty.

Philosophers are not wanting who, beholding in man the image of God, make him almost as free as God himself. They give him a liberty without bounds: but an unlimited liberty would suppose that man himself creates his own nature, that he is himself the author of his desires and faculties, and that he governs himself independent of every law.

Of Absolute Liberty.

There are people who think that an *absolute liberty* at least ought to be admitted, in virtue of which man might act without an internal or an external spring of action. But as there is no effect without a cause, that one thing is always the cause of another, and that nothing, in nature, is carried on but by determinate laws, it follows that every phenomenon, such as that of an absolute liberty which might take place without a cause, is absolutely impossible. If man could act without motive, and only at the pleasure of his caprices, there would be

ıer certainty, nor even probability
under such or such a circum-
ce, he would act in such and such
nner. Sex, constitution, a more or
perfect organisation, the educa-
received, habit, principles, laws,
ality, religion, circumstances,
ensities, and natural faculties,
itous irritations, nothing in short
l make us guess within a trifle to
a being gifted with a similar
ty would determine upon. Besides,
liberty could only be in itself a
radictory faculty, because it would
e us to act reasonably or unrea-
bly, justly or unjustly, in fact
or ill, but always without motive.
should we expect from a man,
r similar circumstances, friend-
and fidelity rather than hatred
perfidy; virtue rather than vice?
y institution which has indivi-
al welfare and the good of society
ts object, would be useless. What
ld be the good of education, the
vation of the mind and heart,
ality, social compacts, punish-
ts, rewards, since nothing, for
a man, would be a motive of
rmination? In this hypothesis,
alone would make an exception
ıe general laws in virtue of which
y phenomenon has its cause, and
ideas, sensations, propensities,
ghts, and actions of that man
ld no more be determined by pre-
ng causes, than any other event
which he had no connection
tever. Consequently, a liberty
this is an absurd chimera.

y maintaining, as some do, that
has only to will to be capable of
y thing, and to be able to do
y thing, a principle is thereby
ended to be established confor-
ble to good morality. But a prin-
e which, at each step that is made
ature and in the study of man, is
tradicted, can it be a good prin-
e of morality? A principle that
riably tends to render us ignorant
the real sources of our actions,
which by that alone de-
prives us of the means of directing them; a principle that makes of an independent will, or rather of a caprice the author of our good and bad actions, which, consequently, destroys all equity in our judgment relative to the actions of others, all justice in criminal legislation, all forbearance and charity; such a principle, is certainly not a principle of good morality.

Application of Dr. Gall's principles to the illegal actions which are the consequence of a particular weakness of the intellectual qualities.

"I here make use of the expression *particular weakness* of the intellectual faculties, because I only treat of the actions which are a consequence of an imbecility more or less of the mind; I shall not speak of those acts which are derived from a complete and general stupidity of the mind. These being purely involuntary or automatical, have not even the appearance of moral liberty, and can by no means constitute the object of my actual researches.

Among the young lads that were brought to us in one of the prisons at Berlin, there was one which more particularly caught our attention. We advised, that he should not be set at liberty, as he would never leave off his practice of stealing; we added, that, it would be better to keep him in a house of security. We communicated our motives to those who accompanied us. They had recourse to the goaler's books, and, to their great surprise, found, that this young lad, from his earliest years, had evinced the most obstinate propensity for theft. Our adversaries took advantage of this circumstance to expose as publicly as possible all that they beheld frightful and dangerous in my doctrine. To condemn, said they, a young man to imprisonment for life, because he has com-

mitted a theft, could any thing be more cruel or more revolting to humanity?

What reason had we to give this advice? I have already shewn that man should be considered under two relations: first as having qualities in common with those of animals, that is, those of an inferior order; then as being gifted with the character of humanity, or qualities of a superior order. I have also shewn that man, by means of his superior qualities, is capable of subduing and directing his propensities of an inferior order. But if the qualities of the higher order are compressed in an extraordinary manner, so as to prevent their action from taking place, whilst those of the lower order are, on the contrary, very active, then the animal part of man exclusively predominates, and the flesh or brutal desires hold in subjection the mind or the disposition of superior properties which are scarcely perceptible. With such an organization for the functions of the soul which belong to a superior order, the same happens which takes place for each organ whose developement is defective; that is, there results from it a relative imbecility, consequently an incapacity of acting morally; whilst the propensities of an inferior order act with the most decided energy. One individual finds himself under the absolute necessity of acting solely from the impulsion of the propensity which governs him, and his organization frequently places him in a condition less capable of conquering himself than a well organised animal. This imbecility does not always exclude other very active properties which are common to animals, such as cunning; so that the same individual, though giving himself up to a culpable and irresistible inclination, seems, under this consideration, to act with reflection and deliberation. It is in this manner that the most stupid idiots always find out the most ingenious means of satisfying brutal lust or their fatal desires

Such was the situation o young thief I have alluded to. superior organs had a defecti velopement; the organ, on the trary, whose too great activity to theft, had acquired a high d of developement and energy, sec by the activity of the organ of ning. This individual was sma squat-set; his forehead was ver depressed behind immediately his eye-brows—very much hol or sloping on the sides abov eyes, but large and prominent to the temple. His physiognom spoke no attention for rational th malice and cunning were all could be discovered. Was it very difficult to conclude, fron organization of this individual he was to be incorrigible?

To make known that speci imbecility which excludes all liberty, I show, in my lessons scull of an individual organize the same manner. It was that young man who died in prise Vienna. He had from his in been always addicted to stealing withstanding the most severe pu ment. The configuration of his is of the worst kind, and anno a ricketty constitution; one o sides of this cranium is thrown b ward and the other forward. forehead is very little elevated depressed; the anterior lateral of the temples are broad, but th semble of the scull is small. advantageous effect or benefit ca expected from punishment or h of correction for half-men of description? We saw a boy a 12 years of age in the prise Bern, badly organized and rick who could not keep himself stealing; with his own pocket of bread he stole that belongin his comrades. At Haina, the seers entertained us for a leng time with an obstinate thief,

Fesselmayer, which no corporeal punishment could correct. He stole everything in the prison he could lay his hands upon—and a log of wood was tied round his arm as a mark of ignominy to guard against him. We conjectured before we saw him what his organization was. Our expectation was confirmed at the first sight. He appeared to be about 16 years of age, although he was actually 26. His head was round and about the size of a child of a year old. Besides he was deaf and dumb, which frequently happens in cases of imbecility.

Thus, although there may be nothing to hope for from these idiots, it does not follow that there may be nothing to fear. It frequently happens, on the contrary, that they are very dangerous, particularly if they have a propensity towards the sex, and that of killing to a high degree, so that the least cause may put them into action. I have mentioned in the first volume of my large work, the case of a young man of 15 years of age, who, during a paroxysm of brutal lasciviousness, abused his sister to such a degree, that it nearly caused her death. I have also spoken of another idiot, who, after having killed his brother's two children, came smiling to him to announce the circumstance; of a third, who killed his brother, and wished to perform the ceremony of burning him; and lastly of a fourth, who, upon the credit of Herder, having seen a hog killed, imagined that he ought to kill a man—which he actually did. We saw a young man in one prison whom no one looked upon as an idiot, and who without any motive killed a child. In vain was he questioned and threatened to learn what could possibly induce him to commit an action so sanguinary and atrocious. His only reply, which he constantly repeated, was that he had seen nothing but black. "Whoever, said he in a lamentable tone of voice, who has not found himself in the same condition cannot believe me; God will forgive me." The forehead of this individual is very narrow and depressed, that is, low and flat; the crown of his head, as in the greater part of epileptic individuals, is very elevated, and the occiput is flat and compressed. In the goal at Fribourg in Brisgau there was a young man about 15 years of age, a half-simpleton, who had successively set fire to nine houses. He always helped to extinguish the fire, and on one occasion he saved a child that otherwise would have perished in the flames. When the fire was over, he thought no more of it, which proves that he acted only from an animal instinct.

That which takes place with individuals relative to theft, murder and arson, equally occurs in other individuals for every other organ gifted with an extraordinary degree of activity. The quality dependent upon that organ acts mechanically in them at each impulsion, without any reflection and with a very feeble conscience. We have seen that the savage idiot of Aveyron has the singular propensity of putting every thing exactly in its place. Since we have seen this savage, we have known a young man whose parents can scarcely persuade themselves that he is an idiot, because independent of some intellectual faculties which he manifests, he has a remarkable spirit of order. He is nevertheless an idiot in a number of other respects. M. Pinel* speaks of a woman, an idiot, who has the decided and irresistible propensity to imitate every thing she sees done in her presence; she repeats automatically every thing she hears, and she imitates the gestures and actions of others with the greatest fidelity, without giving herself any concern whether she may please or displease. "It is remarked, says

* Sur l'alienation mentale, 2nd edition, Paris, 1809, p. 99.

Fodéré,* that, by a most inexplicable singularity, several of these individuals, gifted with so weak an understanding, are born with a particular talent for copying drawings, making rhymes or music. I have known some of them who have learnt of themselves to play tolerably well upon the organ and harpsichord; others, who, without having had masters, know how to mend clocks and make pieces of mechanism. This probably belongs to the most perfect organization of the organ under the dependence of which such and such an art is found, and not to the understanding; for these individuals not only could not read the books which treated of the principles of their art, but they were moreover completely bothered whenever they were mentioned to them, and never attained any perfection." We know a young woman an idiot, to a high degree, who sings songs with considerable justness, and always keeps to the tune and metre.

Such examples as these prove that talents may exist separately; that a propensity or a particular talent results from the particular activity of an organ, and that the activity of an organ, may conveniently take place, whilst, with respect to other organs, there exists a real imbecility.

Besides, this condition having several degrees, it cannot be affirmed, that, for beings so badly organized, all the means of correction may be equally infructuous. Lavater nevertheless considers these individuals as incorrigible, and it is in the forehead that he places the indicative sign of their incorrigibility. "Short,† wrinkled, knitted, irregular foreheads, thrown in on one side, sloping off, or which always fold differently, says he, will never be a recommendation in my opinion, nor will they ever captivate my friendship. As long as your brother, your friend, or your enemy, as long as a man, and were that man even a malefactor, presents you with a well proportioned forehead, never despair of him, he is still susceptible of amendment." It may be perceived that Lavater had a glimpse of the phenomena which I have described, and of which I have cited several examples. My doctrine alone gives a true solution of them. It would be impossible to explain partial and incomplete imbecility, were it not acknowledged that the different properties of the soul and mind have each different organs, and that the manifestation of these properties depends upon organization.

Although these partially imbecile individuals may not be moral beings, nor consequently punishable, the care of watching over them does not belong less on this account to the police of public safety, and it becomes indispensable to keep all sorts of idiots aloof from social commerce in whom signs sufficiently characteristic of wickedness are observed.

(To be continued.)

* Traité du Goitre et du cretinisme. Paris, 1800. p. 133.

† Physiognomy, vol. iii. article *forehead*.

DUBLIN HOSPITAL REPORTS.

From the Third Volume of the Dublin Hospital Reports, and Communications in Medicine and Surgery.

Report of Cases of Aneurism in the Richmond Surgical Hospital. By CHARLES H. TODD, *one of the Senior Surgeons to that Establishment.*

The ligature of the external iliac, carotid, and subclavian arteries, is one of the proudest boasts of modern surgery.

In respect to the operation on the external iliac, Mr. Todd adopted the mode described by Sir Astley Cooper, in preference to that recommended by Mr. Abernethy. This preference was given after repeated trials on the dead and on the living subject, because "Sir Astley Cooper's method afforded the operator a greater facility of applying the ligature to the artery, more room being obtained by it, and with less disturbance of the peritoneum than by the other mode." When, however, it is necessary to apply a ligature to a higher part of the artery, Mr. Abernethy's method may, he thinks, be employed with advantage.

The two cases that terminated fatally exhibited not the slightest traces of peritoneal inflammation, and, in both, the collateral circulation was quickly and effectually established.

"The cases of popliteal aneurism are related chiefly with a view of recommending a more general adoption, than is at present practised, of a preparatory course, previously to operation. I can scarcely doubt, but that in many cases of aneurism, in which operations have failed, from mortification of the limbs succeeding, the patient might have been saved by a delay sufficient to allow some progress to be made in establishing the collateral circulation; and I feel confident that this desirable object may be promoted in most instances of recent disease, situated at a sufficient distance from the trunk, by compressing the principal artery of the limb for a few hours every day, for a period which must vary according to the circumstances of the case."—P. 94.

In some instances, however, notwithstanding every effort to diminish the force of the circulation, an aneurism will increase rapidly—in which case, delay must not take place, and the operation must be resorted to before the tumour has acquired such magnitude as to endanger the soundness of the integuments. If the health also suffers from local pain or irritation, the operation cannot safely be postponed.

Case I.—A young woman, twenty-two years of age, of robust habit, and florid complexion, was admitted into the Richmond Hospital, on the 26th of May, 1819, having a large oblong tumour on the superior and anterior part of the thigh, close to Poupart's ligament, beyond the plane of which, it projected considerably, and ascended so much, that the ligament was arched across the upper part of the swelling. Fluctuation was evident, although the tumour was tense; but no pulsation could be felt, and the superincumbent integuments were not discoloured.

"On the inner side of this tumour, and extending to the left labium, a smaller tumour existed, between which and the large one there appeared to be a direct communication at their bases, although a depression of the skin divided them on the surface; this tumour was also tense, with fluctuation; but its integument was healthy. The thigh, leg, and foot were slightly œdematous; the patient complained of pain on the inside of the knee, and of some numbness of the entire limb —her pulse was perfectly regular; she had no palpitation of the heart or oppression of the chest, and her general health was in every respect unimpaired. Pressure upon the external iliac artery did not affect the size or tension of the tumours; neither were they perceptibly diminished by pressure directly applied to them. No pulsation could be discovered in the course of any of the large arteries below the tumour, although the temperature of the limb corresponded exactly with that of the other."—97.

She said that for four or five months previously, she had felt pains about the groin, at first slight, but gradually increasing. She next perceived the tumour, but denied the existence of pulsation in it at any period.

Two days after admission (28th May) our author proceeded to make an oblique puncture into the tumour with a very small lancet, when a dark-coloured fluid blood flowed from the wound in a gentle but continued stream. When a director was introduced, the blood flowed more rapidly, and carried with it small coagula and particles of colourless fibrine. The wound was closed by adhesive plaster. On the 1st of June, the tumour having increased in size and become more painful, so much resembled an abscess, that another puncture was made with the same result as before. On the 2d of June, the circumference of the diseased thigh, including the tumour at its most prominent part, measured 19½ inches, while that of the other limb was three inches and a half less. In consultation it was agreed that the ligature of the iliac artery presented the only prospect of relief, and on the 3d of June, it was performed in the manner recommended by Sir A. Cooper. On the ligature being tightened, the patient did not complain of any particular sensation in the limb, nor was there any evident alteration produced in the tumour. In the evening there was numbness, with some decrease of temperature in the limb—pulse 100, skin hot and dry. Venesection, effervescing draughts, &c. Sickness at stomach, and pulse at 120, were noted on the 4th of June. On the 7th, there was some hæmorrhage from the tumour, which was considerably diminished in size. The bleeding was easily suppressed. On the 8th, the discharge is profuse—coagula come away freely, some resembling putrid blood—others of a yellow colour, and pulpy gelatinous consistence. We cannot follow the daily detail of symptoms; but have only to state that she died, worn out with pain, irritation, fever, and discharge, on the 17th of June, about a fortnight after the operation. We shall give the dissection in the words of our author, by which our surgical readers will be enabled to judge whether this was

really an aneurism, or a fungoid or hæmatode tumour. We are inclined to the latter opinion.

"The tumour was laid open to its fullest extent, and its putrid contents having been washed out, the internal surface presented a very irregular appearance; no trace of a distinct sac could be observed. The small branches of nerves, which seemed to have resisted the putrefactive effects of the contents of the tumour, were completely insulated, and extended through the cavity unaccompanied by veins or arteries. The muscles, except where they formed the walls of the cavity, were healthy, but somewhat paler than natural. Rather more than three inches of the femoral artery was wholly destroyed; the upper extremity of it which was found in a contracted state, immediately below Poupart's ligament. The lower part of the artery contained a coagulum, which filled its cavity for several inches; the outer surface of this coagulum was very firm, of the colour of fibrine, and in close apposition with the internal surface of the artery; the red globules and more liquid parts of the clot were contained within this fibrous layer, which gave the coagulum a tubular appearance. The anterior part of the crural vein, immediately below the ligament, and where it lies parallel to the artery, was destroyed for more than an inch, and thus opened into the cavity of the tumour. The external iliac artery contained a firm clot, which extended from the point at which the ligature was applied to the orifice of the internal iliac. This clot adhered very closely to the internal coat of the artery, and when torn from it, the latter appeared vascular and villous. The ligature was quite detached, and had every appearance of having been so for some days."—111.

(To be concluded in our next.)

DR. GREGORY'S THEORY AND PRACTICE OF PHYSIC.

History of Dyspepsia or Indigestion.

This ailment, the author observes, "is met with in every country,—in every class of society,—in every season of the year." The meaning of dyspepsia, according to its restricted signification, is limited to derangement in the functions of the stomach, without any other disease. In the work before us, the inconveniences of this limitation are pointed out, and the term is extended to those cases of indigestion which are unattended with well-marked general fever, local inflammation of the stomach, or obvious *cognizable* disease of a remote organ. Dyspepsia is further reduced to *primary* and *secondary;* the symptoms common to both being described as follows:

"The symptoms of dyspepsia are extremely diversified. They may be divided into such as are referrible to the stomach itself, or to its sympathies with other parts of the body. Among the first may be enumerated loss of appetite, nausea, pain in the epigastrium or hypochondria, heartburn; a sense of fulness, distention, or weight in the stomach; a feeling as if a ball was lodged in the œsophagus; acid or fœtid eructations; pyrosis, or the vomiting of a clear liquor, often in vast quantity; and, lastly, a sensation of *sinking* or fluttering at the pit of the stomach. To the second head of dyspeptic symptoms may be referred, among many others, costiveness, or an irregular state of the bowels, with a morbid appearance of the evacuations; pain of the back, and turbid urine; a disagreeable taste in the mouth, especially on first waking; tooth-ache; palpitation, pulsation in the epigastrium, irregularity of the pulse; a short dry cough, and occasional difficulty of breathing; giddiness and head-ache, sometimes referred to the fore, but more commonly to the back part of the head; languor, lassitude, and great depression of spirits, with fear of death, or of impending evil.

"The tongue is very generally referred to as affording evidence of the state of the stomach; but it will often be found that the tongue is perfectly clean when the stomach is most incontestably disordered. It would seem, indeed, as if the morbid appearances of the tongue,—its fur, dryness, preternatural redness and smoothness, and its chopped aspect,—are referrible to the state of the constitution, rather than to any particular derangement in the stomach.

When, however, we observe the tongue *furred and moist* (its true character in common dyspepsia,)—that is to say, when the secretions of the mouth are depraved, we may reasonably presume that there exists a similarly disordered state of the *secretions* of the stomach."

The following is Dr. G.'s classification; to which are added remarks on each variety, which our limits prevent us from being able to extract.

"*Tabular View of the Varieties of primary Dyspepsia.*

"1. Dyspepsia from occasional overloading of the stomach.
"2. ——— from habitual over-feeding.
"3. ——— from habitual indulgence in spirituous liquors.
"4. ——— from want of air and exercise.
"5. ——— from excessive or long-continued evacuations.
"6. ——— from anxiety of mind.

"*Tabular View of the Varieties of secondary Dyspepsia.*

"1. Dyspepsia, symptomatic of general feverishness.
"2. ——— ——— of habitual constipation.
"3. ——— ——— of chronic disease of the liver.
"4. ——— ——— of chronic disease of the spleen.
"5. ——— ——— of functional disturbance of the uterus.
"6. ——— ——— of obscure disease of the kidney.
"7. ——— ——— of chronic affections of the bronchia.
"8. ——— ——— of chronic cutaneous diseases.

"It is unnecessary to say that there is no one drug which will fulfil the great object of treatment, that of giving *tone* to the weakened stomach of a dyspeptic patient. This can be obtained only by measures calculated to avert the cause which may have excited the disease. The tone of the stomach never fails without some assignable reason, which strict inquiry will detect, and the knowledge of which will point out the proper means of relief. Nor is it often that these will fail of success, provided the patient have sufficient firmness to submit to them, and afterwards remain sensible that his health is in his own hands. The assistance of the physician, however, is very often required where the patient either cannot or will not submit to the measures which prudence dictates. In such circumstances, we must endeavour to aid the digestive process by medicines; but I would wish to impress upon the student the impropriety of trusting to them in dyspeptic cases. He should remember that almost any drug will injure digestion in a healthy state, and he should learn, therefore, to be sparing of medicine when the stomach is weakened by disease.

"In every form of dyspepsia, attention to diet is indispensable, and the patient must have regard, not to its quality only, but to its quantity. In a weakened state of the stomach, it must have little given it to do. The body is strengthened, not in proportion to the quantity of food taken in, but to that which is thoroughly digested. Differences in the habits of life will, of course, lead to important differences in the kind and quantity of diet which should be permitted to a dyspeptic patient; but the following may be regarded as rules of very general application:—It should consist in a due mixture of animal and vegetable food, but the former should be eaten only once a day. It should be thoroughly masticated. Great varieties of food at any one time should be prohibited, as leading to an indulgence of the appetite beyond the wants of the system. Articles of difficult digestion should be carefully avoided; such as all kinds of smoked, hard, dried, salted, and long-kept meat; all those dishes where too much nutritious matter is collected in a small space,—eggs, for instance, potted meats, strong soups, and preparations of suet, fat, and butter; lastly, all raw vegetables whatever,

with the exception of ripe fruits. Regularity in the hours of meals should be rigorously enjoined, and the patient directed to abstain from food at all other times."

PHYSIOLOGICAL OBSERVATIONS

Experiments and Observations upon the Fifth, Seventh, and Eighth Pair of Nerves. By S. D. Broughton, Esq. *Mem. Roy. Coll. Surg. &c.*

The following experiments were made by the author for the purpose of satisfying his mind by actual observation of some points, which had previously undergone a strict scrutiny in able hands —and, although nothing new is elicited on the subject, they afford additional evidence in support of prior investigations.

Experiment 1.—The facial branch of the fifth pair of nerves was exposed, just as it emerges from the foramen, and detached by a blunt needle passed under it. The subject of the experiment was an ass, of one year old. By touching and dividing the nerve, signs of great sensibility were manifest. The superior divided end retained its sensibility, and the lower was quite insensible: the division, therefore, was complete. The third branch, on the same side, was similarly divided. The lips on this side lost their sensibility, and their natural tone and adjustment. The ala nasi was also rendered insensible, but the nostril retained its movements in respiration. The branch of the seventh pair, called the communicans faciei, was next exposed, on the posterior edge of the masseter muscle, under the zygomatic process, on the same side. There was not observed any difference between the sensibility of this nerve and the other two. The nostril, previously in full action, immediately ceased to move, and became collapsed; and the lips and muscles on the other side of the face were drawn away, as if deprived of their antagonists, and the animal could eat only on the sound side. A kind of sneezing expression marked the countenance, from the incapability of the ass to regulate its features by a proper adjustment of the muscles on the side submitted to experiment.

Experiment 2.—The first experiment being on the left side, the right was tried on the following day. The nerves were divided just as before, with the same results. Both nostrils were now collapsed and motionless, and, with the lips, had lost their sensibility. The ass had no power to pick up its corn, and the under lip hung flaccid and motionless away from the teeth.

Experiment 3.—An aged horse was thrown, and the portio dura exposed as close as possible to the edge of the parotid gland, under the ear. In the progress of the dissection, three branches were seen coming out upon the face, the lowest and largest being about the third of an inch in width. They were each successively pinched and pricked, and they all exhibited signs of sensibility. On dividing the two upper branches, nothing occurred; but, when the lower branch was cut in two, the nostril below immediately ceased to move, and became closed, and the sensibility of all the parts below remained entire. The lips on this side seemed to have lost their power of motion, being drawn towards the other. The same operation was performed on the opposite side of the face; and then both nostrils remained closed and motionless, but retained their sensibility. The lip fell from the teeth of the lower jaw loose and flaccid, and sensation continued in both. The animal had no power to pick up its corn. The facial branches of the fifth nerve were successively cut through on each side; when the nostrils and upper lip lost their sensibility, the lower only retaining it.—Mr. Brodie and Mr. Cutler were present at this experiment.

Experiment 4.—An aged horse was thrown, and the two lower of the three branches above described were cut through, as close as possible to the parotid gland. The uppermost branch was left entire, being supposed to belong to the fifth pair. The sensibility of the divided nerves was satisfactorily ascertained; but it was now particularly noticed, that at one moment they appeared sensible, and at another not so; and this seemed to depend upon whether their upper or lower edges were touched with a needle. Immediately after division, the nostril collapsed, and sensibility remained. The

same division was made on the opposite side, with the same results. The lip fell from the lower jaw, and the animal could only eat by the general movement of the jaw, but could not pick up food.

There appearing to be some uncertainty about the three facial branches, so near each other, in front of the parotid gland, the horse was killed, and these branches traced to their origins; when the circumstances of their sensibility were explained. The two lower branches were found to belong to the trunk of the portio dura, which, imbedded in the gland, bifurcates immediately on emerging from it, each branch of the nerve being accompanied, in the same sheath, by one from the fifth pair. They are easily separable with the fingers without injury to either, not being interlaced. The uppermost, and smallest of the three, is a branch of the fifth alone. It now became necessary to divide the portio dura where it passes alone through the gland, before its bifurcation and junction with branches of the fifth nerve.

The division of these three ramifications does not affect the sensibility of the nostrils and lips, because these parts are otherwise supplied by the fifth nerve; but the division of the lower two is attended with loss of motion, from the influence of the seventh nerve being cut off from the nostrils and lips altogether. The fasciculus formed by the junction of the seventh and fifth nerves, as they pass from the edge of the gland over the angle of the jaw, sufficiently accounts for the supposed sensibility of the portio dura, and the apparent inconstancy of the evidence of sensation mentioned in the fourth experiment, as well as the minor degree of sensibility ascribed to this nerve by others. Probably, many contradictory testimonies relative to nervous functions may be attributed to similar circumstances.

Experiment 5.—An aged horse was thrown, and the parotid gland was divided, in order to expose the trunk of the portio dura unblended with any other nerve. To avoid the great bleeding which attends the wounding of the gland with a knife, the nerve was insulated by the fingers and blunt instruments, and got at with some difficulty. It was transfixed with a pin, pinched, and cut through slowly with scissars, and not the slightest sign of sensation was manifested. The nostril immediately collapsed, and its sensibility remained entire. The lips on this side appeared loose and flaccid, and fell away from the teeth; they retained their sensibility, and the mouth was drawn on one side, its corresponding muscles having lost their motion. The three branches were then divided on the other side, and the paralysis was rendered complete, without any diminution of sensibility.—Mr. Brodie witnessed this experiment.

(To be concluded in our next.)

Dr. Kinglake on Elaterium.

"A medicine so active as elaterium may probably be employed in doses so small as to be incapable of affecting the first passages, as an useful alterative, in chronic diseases, originating as well from vitiated excitement in structures not disorganized, as in morbid enlargement from change of texture and growth of new parts. The whole class of glandular diseases, whether occurring in visceral organs or in glands themselves in their insulated situations, presents the sort of distempered inveteracy that would require all the subtilty and power appertaining to elaterium to overcome it. Dr. Ferriar, in his Medical Reports, has suggested that this medicine might prove an efficacious alterative in obstinate diseases of long standing. Impressed with a similar persuasion, it has been already subjected to trial under my direction;—but, it must be confessed, not sufficiently even to warrant a report of its effects, much less to decide on what it may, under a more extended and varied application of its powers, be capable of accomplishing. The form in which it has been ordered by me, has been a solution of one grain of the extract of elaterium in one ounce of proof spirit; of which thirty drops have been administered as a dose, three times a

day. This dose, if the solution of the medicine be accurate, will be equivalent to a sixteenth-part of a grain of the extract in substance; and even this small portion has been known to nauseate. For children, it would be advisable to begin with ten drops, and to advance the number gradually until sickness may be induced, which should be regarded as a test of the maximum dose. By slow and progressively augmentation, it may be ultimately borne to the extent of an eighth, or even a quarter of a grain, without disordering either the stomach or bowels. But the ability to take the increased dose arises rather from a familiarity obtaining between excitability of the stomach and the medicine, than from an inefficiency of the latter. The influence of elaterium will proceed to a final point of saturation, when it will be no longer borne. To attempt to urge it beyond that extent, would be to overpower vital action in a manner that would be distressing to the patient's feelings, and may even endanger life itself.

"After powerful medicines, such as elaterium, mercury, arsenic, zinc, antimony, prussic acid, opium, digitalis, colchicum, the various narcotics, &c. have been taken long enough to disorder either the stomach or head, they should be discontinued for an interval sufficiently long to allow such saturated or redundant influence to subside, when they may be respectively resumed at the lowest doses, and gradually carried as far as the curative indication may appear to require."

Case in which the Duodenum was imperforate, and other Visceral Peculiarities existed in a Child. By H. JEFFREYS, Esq.

I was desired to examine the body of a male infant, who had died on the ninth day from its birth. I was informed that the mother had gone her full time. The child, when born was in a state of considerable emaciation; and the anus was observed to be unusually small. It had vomited incessantly till its death, and, besides the breast-milk and other food, a large quantity of green slimy matter had been continually rejected from the stomach. Soon after birth there had been a discharge of meconium from the anus, and afterwards some small, green, slimy evacuations took place; but the child had no stool having any resemblance to fæces, and a clyster that had been administered was returned unchanged. Its voice was particularly puny and weak; the face and eyes were frequently convulsed and distorted; and it continued to emaciate till its decease.

I opened the body the following day. There was no omentum. The stomach was very much distended; and, when cut into, a large quantity of green fluid escaped. Its villous coat was covered with large red patches, apparently arising from inflammatory action. The intestines, in colour, size and appearance, resembled a cluster of earth-worms. The root of the mesentery, instead of adhering to the vertebræ, was attached to the cardiac extremity of the stomach, from whence the intestines hung by it, as by a stalk or pedicle. The head of the colon had no attachment to the ileum, but was fixed to the root of the mesentery and stomach, from whence the bowel took its regular course to the rectum. The duodenum was twisted round the root of the mesentery and the head of the colon; and, on passing a probe from the stomach into that gut, it was found to be completely impervious about half an inch from its origin.—*(Med. Phys. Journal.)*

Clarges-street, April, 1823.

---

*Dilatation of the Female Urethra.**

"There is a very general prejudice generated in the human mind against the knife, where other means, though more slow and painful, offer

* Sir A. Cooper, Mr. Birt, Mr. Chapman. *Med. Chir. Transactions,* vol. xii.

a chance of success. It is very praiseworthy in Sir Astley Cooper, whose dexterity with cutting instruments is tolerably well ascertained, to exercise his invention, in superseding, on some occasions, the very instruments by which he has gained so much of his celebrity."

"The dilatability of the female urethra has been proved by papers in the transactions under review, from the pen of Mr. Thomas, Mr. Travers, and Sir Astley himself. The latter has here endeavoured to shew a better means of producing this dilatation, than by the introduction of sponge tents, which is liable to the objection of requiring several hours of pain and retention of urine while lying in the meatus. This inconvenience suggested to Sir Astley the utility of an instrument constructed on the plan of a speculum ani to enlarge the urethra, which meanwhile would have the advantage of permitting the urine to escape. An opportunity was soon afforded in the case of a Mrs. C. a lady who, for six months, had been labouring under extreme irritability of the bladder, and such pain and difficulty in making water as induced suspicion of stone. On examination, stone was discovered, and Mr. Weiss* of the Strand, quickly constructed an instrument (vide plate) which answered the purpose. On the 7th of January, 1822, Sir Astley, in the presence of Dr. Nuttall and Mr. McNab, introduced the dilator at eight o'clock in the morning. At four P. M. Sir Astley removed the instrument, and readily felt the stone with his finger. The forceps were introduced and the stone extracted. For a few days after the operation, the patient experienced a severe attack of irritative fever, which was subdued by the usual antiphlogistic means, and our author had the pleasure of seeing his patient gradually restored to health, having never lost the power of retaining her urine. From the facility with which the meatus dilated, Sir Astley thinks there was no absolute necessity for allowing the dilator to remain so long in the passage, and is therefore determined, in future, to use it for a few minutes only."

Cancer (Retrospective.)

Dr. Akenside, physician to St. Thomas's Hospital, in 1760, did not confine his attention entirely to "the pleasures of imagination," though he was far more distinguished by his poetry than his physic. When physician to St. Thomas's Hospital, he made some observations on scirrhus and cancer, in which he experimented on the oxymurias hydrargyri, and also on the cicuta, which was then coming into vogue for the cure of strumous affections. We shall only glance at one or two cases. The first was a woman, 50 years of age, who came under our author's care in St. Thomas's Hospital, for a scirrhous swelling on the right side of her neck, which impeded deglutition, and caused great pain in her

* The late ingenious improvements of Mr. Weiss, and the liberality with which he spends his money in bringing surgical instruments to a state of perfection hitherto unknown and unsurpassed, certainly entitle him to the consideration and encouragement of the profession at large.

For a length of time past, there has been a peculiar sluggishness, not to mention a sameness, in the advancement of this branch of the mechanical art—than which perhaps no other has such decided claims upon inventive humanity. Mr. Weiss however, appears to have roused himself from the listless lethargy in which his contemporaries seem still to be absorbed—and, from the approbation which his labours have hitherto met with—added to the persevering disposition of his naturally indefatigable character, and his easy conception of the idea when any thing new is suggested to him by others, we have still room to augur fresh acquisitions to our surgical apparatus from the same quarter.—Ed.

throat and mouth. The external surface of the tumour was also very painful, and from it stinging or lancinating pains radiated over the temple, and in different directions. Dr. Akenside gave her twice a day a quarter of a grain of the oxymuriate in a spoonful of proof spirit, keeping the bowels open with some aperient waters. Under this regimen she found daily benefit. The pains gradually vanished—the scirrhous diminished—the deglutition became easy—and the mouth free from soreness. On laying aside her medicines the disorder returned, and she was re-admitted as bad as ever. A repetition of the same treatment restored her once more, and she was discharged cured.

Another case of scirrhous and cancerous tongue cured by the same remedy, is related.

"We do not say that the above were cases of scirrhus or cancer; but we have seen several cases where tumours of a very suspicious appearance were dispersed by quietude, open bowels, low diet, and small doses of the oxymurias hydrargyri."--*(Med. Chirur. Quar. Rev.)*

EXTRACTS FROM MEDICAL JURISPRUDENCE.

Of Actions by Medical Practitioners.

A physician cannot maintain an action for his fees, for they are honorary and not demandable of right: "and it is much more for the credit and rank of that body (the physicians), and perhaps for their benefit also, that they should be so considered: and I much doubt, says Lord Kenyon, whether they themselves would not altogether disclaim such a right, as would place them upon a less respectable footing in society than that which they at present hold." *Chorley* against *Bolcot*, 4 T. R. 317. It was contended in this case, that there was no authority in the books for placing physicians and barristers' fees on the same footing; the regulation with regard to barristers being founded on grounds of public policy, as appears by a passage in Tacitus, to which Mr. Justice Blackstone refers; in which passage it is taken for granted that Medici were entitled to a remuneration, because their situation was dissimilar to that of advocates.

But though a physician cannot recover his fees by process of law, yet *pro concilio impenso et impendendo* is a good and valuable consideration for an annuity; (9 Co. Rep. 50; 7 Co. Rep. 10, 28.) And this was formerly a very frequent mode of remuneration for professional services both in law and physic, though at the present day it does not frequently occur.

If a bond, bill, or note were given for medical attendance, the consideration would be good, though the original fees could not have been recovered. A distinction might, we think, be drawn between the fees of a physician and his travelling expences, which are frequently considerable: but the case of Chorley and Bolcot, before cited, is against it.

If a medical practitioner passes himself off as a physician, (by no means an unfrequent practice in distant parts of the country,) although he has no diploma, and no right to assume that character, he cannot maintain an action for his fees. *Lipscombe* v. *Holmes*, 2 Camp. 441. Though as a surgeon he might have recovered compensation: and, even if he were no regular surgeon, the doctrine in *Gremaire* v. *Le Clerc Bois Valor*, 2 Camp. 144. would entitle him to recover in an action of assumpsit. But query the authority of this case.

If there be any promise, a physician may receive on a *quantum meruit*, *Shepherd* v. *Edwards;* Hill, 11. Jac. 2. Croke, 370. In this case the plaintiff declared that he, being

a professor of physic and surgery, had cured the defendant of a fistula; and he had judgment. All physicians may practice surgery, (32 Hen. VIII.) though surgeons may not encroach in physic: therefore query whether in this case the plaintiff did not sue as a surgeon; and the disease was one which in this day would clearly be classed as a surgical case. It was not so however, in *Dale* against *Copping*, (Bulst. part 1, p. 39,) when the promise of an Infant to pay a certain sum to the defendant for curing him of the falling sickness was held binding; "for that this shall be taken as a contract, and that to be for a thing in the nature of necessity to be done for him, and the same as necessary as if it had been a promise by him made for his meat, drink, or apparel; and in all such cases his promise is good, and shall bind him."

Of Actions against Medical Practitioners.

If a physician, surgeon, apothecary, or other medical practitioner, undertakes the cure of any wound or disease, and by neglect or ignorance the party is not cured, or suffers materially in his health, such medical attendant is liable to damages in an action of trespass on the case: but the person must be a common surgeon, or one who makes public profession of such business, as surgeon, apothecary, &c.; for otherwise it was the plaintiff's own folly to trust to an unskilful person, unless such person expressly undertook the cure, and then the action may be maintained against him also. See *Bull*, N. P. p. 73; 2 *Esp.* N. P. p. 601.

"And it seems that any deviation from the established mode of practice shall be deemed sufficient to charge the surgeon, &c. in case of any injury arising to the patient." See Slater v. *Baker* and *Stapleton*, 2 Wils. 359; which was a special action on the case against a surgeon and an apothecary, for unskilfully disuniting the callous of the plaintiff's leg after it was set, which it appears was done for the purpose of trying a new instrument. The plaintiff recovered £500. against the defendants jointly, and the chief justice said he was well satisfied with the verdict. On a motion for a new trial, the judgment was affirmed by the whole court.

In *Seare* against *Prentice*, 8 East's R. 348, it was determined that this action lies against a surgeon for gross ignorance and want of skill in his profession, as well as for negligence and carelessness to the detriment of a patient; though, if the evidence be of negligence only, which was properly left to the jury, and negatived by them, the court will not grant a new trial, because the jury were directed that want of skill alone would not sustain the action.

In the case of *Neale* v. *Pettigrew*, a surgeon was held responsible in damages for the negligence and unskilfulness of his apprentice or servant.*

Though the cited cases are surgical, there is no doubt that similar actions would be maintainable against physicians or other medical practitioners; but as internal injuries are less demonstrable than external, there might be some difficulty in obtaining the necessary evidence.†

[To be continued.]

---

* This case is recent, but we believe not reported. The plaintiff was a respectable artisan, and had been employed as engineer and brass founder in a large manufactory in the city, and by his industry was enabled to earn about four guineas per week: the plaintiff's right arm was dislocated by a fall from a gig. Mr. Pettigrew, the defendant, was sent for; but being unable to attend from illness, his assistant undertook the case, but conducted it so unskilfully that the plaintiff lost the use of his arm. —Damages, £800.

† Most of the references are omitted in these extracts.

MEDICAL BOOKS,

Published by E. Cox and Son, St. Thomas's Street, Southwark.

Essay on Poisons.—An Essay on Animal, Vegetable, and Mineral Poisons, in which are detailed the Symptoms, mode of Treatment, and Tests of each particular Poison, with the general Morbid Appearances on Dissection. To which is added, the Means to be employed in Cases of Suspended Animation; with Thirteen colored Plates of the more Poisonous Indigenous Plants. 3*s.* 6*d.*

Fox on the Teeth.—The Natural History and Diseases of the Human Teeth. In Two Parts. Part I. containing the History of the Formation and Structure of the Human Teeth: the Symptomatic Diseases incidental to the first Dentition: the changes which take place during the Second Dentition; and the Treatment to prevent and remedy Irregularities in the Arrangement of the Teeth.

Part II. containing the History and Treatment of the Diseases of the Teeth, the Gums, and the Alveolar Processes, with the Operations which they respectively require. To which are added, Observations on the Diseases of the Mouth, and on the Mode of Fixing Artificial Teeth. Illustrated by Plates. By the late Joseph Fox, Surgeon Dentist Extraordinary to their Royal Highnesses the Dukes of Kent and Sussex, Lecturer on the Teeth at Guy's Hospital, &c. &c. £2 2*s.* boards.

Dr. Good's Nosology.—A Physiological System of Nosology, with a correct and simplified Nomenclature. Dedicated by Permission to the Royal College of Physicians, London. By John Mason Good, M. D. F.R.S. 8vo. £1 1*s.*

Hospital Pupil's Guide.—The Hospital Pupil's Guide; being Oracular Communications, addressed to Students of the Medical Profession, including plain and useful Directions relating to the best mode of attending to the various branches of Medical Study. 1*s.* 6*d.*

Innes on the Muscles.—A Short Description of the Human Muscles, arranged as they appear on Dissection, together with their several Uses, and the Synonymes of the best Authors. By John Innes, 8th edition.

Monro on the Bones.—The Anatomy of the Human Bones. By the late Alex. Monro, M. D. With Engravings, selected and reduced from Cheselden's Large Plates, 12mo. 8*s.*

In the press, A new edition of Dr. William Hunter's large plates of the Human Gravid Uterus, with descriptions in Latin and English; to which will be prefixed a recommendatory preface by the late Thomas Denman, M. D. and embellished by a large portrait of the late John Haighton, M. D. many years Lecturer on Midwifery and Physiology, at Guy's Hospital.

In the course of the ensuing Autumn will be published, a new edition of the late Dr. Thomas Denman's Introduction to the Practice of Midwifery, with a Memoir of the Author, and illustrated by several plates.

MARRIED.

On Tuesday, 24th instant, at St. Dunstan's in the West, by the Rev. Thomas Price, Mr. David Price, Surgeon, to Elizabeth Mary Anderson, only daughter of John Anderson, Esq. of Fleet Street.

On the 25th instant, at Minster, Isle of Thanet, by the Rev. Richard Roberts, Joshua Waddington, Esq. Surgeon, to Maria, only daughter of the late Ambrose Collard, Esq. of Minster.

TO CORRESPONDENTS.

The article on Quackery, or the "jus tuandi et vastandi impune per totam terram" *is received, and will be reserved for some forthcoming Number.*

"*The Batchelor of Salamanca*" *is too pointed: we cannot encourage personalities, particularly where the object aimed at is rather* meritorious *than otherwise—nor do we deal in inuendoes but where* topical applications *are called for.*

*We would recommend Mr. P. **** to try the* "aqua mirabilis," *sold with other* genuine *nostrums, in* Piccadilly.

Senex *is incorrigible.*

Tyro *and I. P. are returnable.*

ERRATA FOR No. XX.

Page 314, second column, 15th line, *for would be,* read *would not be.*

In our second paragraphic notice to correspondents, last page, read, *contra vim mortis non est medicamen in hortis,* instead of *mortem* and *hortum, &c.*

London:

Printed by E. JUSTINS, 41, *Brick Lane, Spitalfields.*

Published by COX and SON, St. Thomas's Street, and 39, High Street, Southwark. Sold also by Sherwood, Neely, and Jones, Paternoster Row; Simpkin and Marshall, Stationers' Court; Callow and Wilson, Princes' Street, Soho; John Cox, Berner's Street, Oxford Street; E. Willson, Corner of Royal Exchange; Chappel, Cornhill; W. Turner, Cheapside; T. Boys, Ludgate Hill; H. and W. Smith, 192, Strand; G. Roake, 31, Strand; W. Sams, St. James' Street; W. Stewart, South Bridge Street, Edinburgh; Hodges and M'Arthur, Dublin; &c. &c.

THE WEEKLY

MEDICO-CHIRURGICAL & PHILOSOPHICAL MAGAZINE.

No. XXII.] SATURDAY, JULY 5, 1823. [*Price* 4*d*.

" FLORIFERIS, UT APES, IN SALTIBUS OMNIA LIBANT
OMNIA NOS, ITIDEM, DEPASCIMUR AUREA DICTA."

DR. GALL.

OF ILLUSIVE LIBERTY.

To those who deny free agency, the internal sense of liberty is commonly opposed. It is said, that every one feels it; that, whenever neither physical nor moral constraint does not force us to act, we act freely, that is, we could have acted in such or such other manner. But as the adversaries of free agency prove that this sentiment, this internal conscience are but illusive, it would be better, for the good cause, to abandon the argument.

In fact, acting only in consequence of desires more or less imperious, without choice and without will, man feels a sense of satisfaction which unites to the accomplishment of his desires, and this satisfaction is the more acute as those desires were more pressing. It is this contentment which deceives man, and which makes him believe that, under this circumstance, he acts with perfect liberty. Thus he thinks that he acts freely when he walks upright, yet his organization compels him to do so; the man agitated by jealousy and the desire of revenge, and he who consumes the fire of love, look upon themselves as free as long as their desire and its accomplishment make them feel satisfaction. No sooner however does the storm abate than their language is changed; then they acknowledge that the violence of passion had carried them away. We are frequently without any sensual appetite; but no sooner does an object provoke the organs than we immediately experience the desire of being in possession of the very thing, which a moment before we would have despised, and we think that our determination in this respect was a free act of the will. Animals do not enjoy a real liberty; they act nevertheless without labouring under any apparent constraint. Like man, they experience the satisfaction which results from the accomplishment of their desires. Can it be said that the sheep and the tiger are free, because the one browses the grass, and the other tears its prey to pieces with a sentiment of satisfaction?

It is because this internal sentiment has been confounded with real liberty, that the following reflections have been thought capable of being opposed to it. " A ball, says Hommel, upon a plank or plain surface, moves backward and forward, and from right to left. If the plank be in a state of quiescence and perpendicular, the ball remains motionless. If that ball were conscious of its motion, and that of the cause, it would think that it moves voluntarily." Leibnitz compares liberty to a loadstone which would take pleasure in pointing to the north. " In this case, says he, it would also imagine that it moves freely and independently of every other cause, for it could not perceive the imperceptible movements of the magnetic fluid."*

Even our judgment, amidst a crowd of circumstances, is blended with a sentiment of contentment, without, on that account, being the result of our reflection. This is the reason

* Zoologie Philosophique, t. xi. p. 343.

why we judge the same object differently, according as, from one instant to the other, that which passes within us or out of us, has produced some change in our interior. In this sense, M. Lamark is right in saying, "that the diversity of our judgment is so remarkable, that it frequently happens when the consideration of the same object gives rise to as many particular judgments as there are persons who undertake to pronounce upon that object; that this variation has been taken for a liberty in the determination; but we are deceived, and that it is but the result of the different elements which, for each person, enters into the judgment executed."

It is in the same sense that the following passage from M. Fuerbach must be interpreted: "the faculty, says he, of being determined by the ideas to realize an object or to act, is accompanied with the consciousness of an independent activity, and with an absolute spontaneity. When of two possible opposed determinations, we, in fact, decide for the one or the other, that we reject the one and desire the other, we believe, according as immediate consciousness teaches us, that the cause of this choice resides entirely with ourselves; that the faculty of desiring is the cause of desire, and that, under the same conditions, it could have determined as well for one thing as for another. Although, in this case we appear, not as determined, but as determining, this sentiment nevertheless does not guarantee our liberty to us, and we cannot consider it as a proof of our independence of natural causes, without exposing ourselves to the founded objections of the determinists, and without contradicting the natural law of the constant concatenation of cause and effect. This internal sentiment may be an illusion. We only have this sentiment of liberty, because we do not discover the secret threads which unite causes to effects, and which lead us away towards such or such an object."

It is here then that these passages are armed against those who wish to prove free agency by that internal conscience, by that illusive sentiment of liberty founded only on contentment, and satisfaction of desires.

What then in fact is the species of liberty that ought to be admitted for man, as a being gifted with propensities, with sentiments and talents, in a word, with moral qualities and intellectual faculties?

(To be continued.)

Application of Dr. GALL's *principles to the illegal actions which are a consequence of mental alienation.*

Mental alienation is either *general*, when the functions of all the faculties of the soul and mind are disordered; or *partial*, when this derangement only takes place in one or in several organs. Mental alienation, general or partial, may be *continued* or *intermittent*.

General alienation, continued or permanent, manifests itself in so visible a manner, that one cannot be deceived of its existence. Therefore there is no risk of considering the actions committed in this state as being done with a moral liberty, and of rendering their authors responsible for them. It is only to this kind of alienation that the definition given by Locke is applicable, which says that folly consists in a disordered reason and judgment. Other writers call mental alienation the condition in which one is not conscious of oneself; but this disposition is evidently false, for this absence of self-consciousness cannot be proved in any kind of mental alienation. If it be said that the individual, returned to his senses, has no remembrance of the passed folly, I will answer in the first place that this want of remembrance does not always occur; and, in the second place, that this absence of the me-

mory does not prove that self-consciousness does not take place during the time the mind is alienated. I endeavour to rectify these erroneous or defective notions, because they contribute in causing false judgments to be delivered over several actions. They suppose culpability in acts which, examined with more attention, ought only to be considered as consequences of a real alienation of the mind.

But if I say that mental alienation exists, when the ideas or sensations, whether generally or partially, do not agree with the laws of the functions of a regular organization, nor with the real state of external things, this definition applies to all kinds of alienation; and, at the same time that it indicates that the individual imagines things which are not, or represents things otherwise than they are, it justifies the use of the expressions of *wandering and mental alienation.*

I have already said that permanent general alienation cannot be mistaken. But the case is entirely different, when the general alienation is periodical, and when the fit, after having entirely ceased, begins again, either by irregular periodical returns, or after a fixed time, or when the alienation only takes place for certain particular qualities, especially when this partial alienation from time to time entirely disappears, and when it returns sometimes irregularly, at others periodically. Several moral qualities or intellectual faculties do not experience any derangement during the paroxysms of partial alienation; and in the latter, as well as in general intermittent alienation, the lucid intervals do not betray any traces of mental wandering. Neither is partial alienation always a consequence of the derangement of the intellectual faculties; the propensities or moral sentiments often suffer alone, and the mind or the intellectual faculties remain perfectly sound. These different relations render the judgments we pronounce over the innocence or culpability of equivocal actions very difficult. I will in consequence show some new views to the natural history of mental alienation, considered in its relation with medicine, jurisprudenee and legislation.

To make my readers understand better the nature of mental alienation, I shall compare it with other known diseases. Every one knows that, in intermittent fevers, in epileptic attacks and in several other known maladies, the health seems to be perfect as soon as the fit is over. Again it is known that, if the disorder have a regulated course, the fits are manifested under their real appearance. But the primitive and ordinary symptoms of the same disease often change in such a manner, that it declares itself under quite a different form. It is in this manner that an intermittent fever shews itself sometimes under the appearance of simple pain in the side, or tooth ache. The disguise which the disease then assumes, does not change the nature of it; it requires the same kind treatment that is employed to cure it as when it appears under its habitual aspect.

On the other hand, each viscus in particular may be diseased, whilst the others remain in health. Each particular sense may be deranged in its functions whilst the functions of the other senses continue to be carried on without any interruption.

Mental alienation in the same manner is under the influence of the general laws of organization. Its paroxysms are sometimes intermittent, and, in this case, when it ceases, one would believe that the patients' health is by no means altered; at other times intermittent alienations present themselves under appearances entirely different. Certain periods of developement, the approach of accidental or periodical evacuations, the difference of ages, the influence of seasons, temperature, nourishment,

place of residence, state of the mind, in a word, all the causes, which determine the crisis, may produce the most considerable differences in the form and symptoms of the fit according as these said causes are diversely modified. The individual who, in a preceding fit, appeared to be a fury, may, in a succeeding one, devote his whole time to the exercise of the most fervent piety; he who to-day gives himself up to the most boundless joy, may to-morrow be absorbed in the blackest melancholy.

Each organ of the qualities of the soul, and consequently each faculty belonging to the soul and the mind may also experience a derangement, whilst the others continue to act in their natural order. In this case, such or such a sensation, such or such an idea only are drawn aside from the natural laws; and, in proportion as this state is permanent or intermittent, it may be said that man has a permanent or intermittent fixed idea, or otherwise a sensation,—a permanent or intermittent fixed inclination. It is then easily conceived wherefore, in a state of real alienation, the intellectual faculties of a superior order, such as memory, judgment, imagination, often remain intent, and why the definition given by Locke to alienation only accords with general derangements and not with those of a partial nature.

In order to put my readers in a condition to judge of the cases in which man, in consequence of his illegal actions, should be considered as really alienated, I will take into consideration, 1. intermittent alienations, during the paroxysms of which certain faculties are manifested with great energy; 2. partial alienations; 3. alienation called reasoning; 4. alienations accompanied with visions; 5. the alienations which incline the patients to attempt the life of their neighbours, their children, or other persons innocent as far as regards them. *(To be continued.)*

DUBLIN HOSPITAL REPORTS.

(Concluded from page 328.)

The second case presents no ambiguity. The patient was a printer, 28 years of age, who had received a blow from the handle of the press on his left groin, about six or seven months previously. Soon after this injury, a small pulsating tumour was perceived in the part, which gradually increased, and presented the following appearances on admittance into the Richmond Surgical Hospital, on the 14th November, 1820.

"His countenance is pale and sallow; his stature is low; his limbs small, and he appears to possess a weak and delicate constitution. Immediately below Poupart's ligament, on the left thigh, there is an aneurism of the femoral artery; the tumour is as large as a swan's egg; it pulsates strongly; pressure above the tumour suspends the pulsation, and the swelling almost entirely subsides; the integuments are healthy; about two inches below this, and in the line of the femoral artery, there is another tumour of great magnitude, and of a globular figure; it extends to the internal condyle of the femur; has a tense firm feel, with an obscure fluctuation; the integuments are of a dusky yellow colour, and are traversed by three or four enlarged veins."—112.

When horizontal, no pain in either tumour. There is some numbness in the leg. He was kept in the hospital till the 4th of December, during which time his general health improved by proper diet and medicines. On the above day, Mr. Todd tied the external iliac artery without any difficulty. The ligature drawn, the pulsation in the inguinal tumour ceased, and the tumour itself became flaccid. The lower tumour remained unaltered. On the 7th, we observed that there was some tenderness near the wound, the pulse being 112. Venesectio ad ℥x. The inguinal tumour has acquired a solid feel, and pressure has no effect in diminishing its bulk. The lower tumour is smaller, and much softer than before the operation. On the 8th, he was again bled, having some uneasiness in the lower part of the abdomen, with headache. On the 25th, the ligature came away—the wound is healing—the tumours much diminished, and free from pain—the countenance improved—good appetite—bowels regular—pulse 80. On the 28th, a profuse hæmorrhage suddenly took place *per saltum*. Pressure stopped the flow—a composing draught was exhibited—and the strictest quietude enjoined. The wound was left uncovered. December 30th, a hæmorrhage this evening to the amount of

six ounces, which was suppressed, as before, by moderate pressure. His bowels are confined, and a circumscribed tumour, with pulsation, is indistinctly felt, in the abdomen, to the left side of the umbilicus. No hæmorrhage recurred after this till the 15th of January, when a considerable flow took place. It was now determined to apply a ligature to a higher part of the artery.

"While we were fixing the patient on the operation table, a profuse hæmorrhage took place, which was stopped by Mr. Cusack pressing with his finger at the bottom of the wound, until I inclosed the iliac artery in a ligature. This was effected without difficulty, an incision having been made through the abdominal parieties, in the direction of the artery, as recommended by Mr. Abernethy, so that this and the former incision somewhat resembled an inverted T. The patient bore the operation with great fortitude, and his progress was as favourable as could have been expected for several days. On the evening of the 21st, however, he had a very severe rigor, which continued for almost an hour; this was succeeded by an hot fit of a few minutes duration, and the paroxysm terminated in a profuse sweat, which lasted for some hours, and weakened him exceedingly."—119.

On the 22d of January, symptoms of trismus, and, ultimately, of tetanus, came on, and terminated the patient's existence in two days.

"Dissection—The larger tumour was found to consist of an irregular sac, with which the femoral artery communicated by a small aperture, which had the appearance of a rent in the coats of the artery anteriorly; the sac was formed of all the contiguous structures, and its internal surface was dark coloured, and very unequal; its contents were grumous blood, almost in a state of solution, and some soft coagula of lymph. The femoral artery, at the place of the first ligature, was open at both extremities, but the superior orifice appeared actually dilated, and we could not discover that any process had taken place here tending to the obliteration of the artery. It was a matter of surprise to those who attended the dissection that hæmorrhage had not sooner occurred, and that it did not prove immediately fatal. The ligature applied in the second operation was completely detached from the artery, and lay loose in the wound; here the orifices of the artery were closed, and a coagulum of more than an inch in length, occupied the upper extremity."—121.

The third case, was a farmer, aged 30 years, of a florid complexion, and delicate habit, admitted the 30th of June, 1820, for aneurism in the right ham. After hard labour in ploughing, five weeks previously, a pain and swelling of the leg took place, and soon a tumour in the ham was perceived, rather larger than an egg, and pulsating strongly. The contents of the sac were quite fluid, as it could be emptied completely by pressure. The disease being so recent, the patient was confined to the horizontal posture, put on low regimen, and occasionally bled and purged. Our author next contrived an ingenious truss, the pad of which being placed in the line of the crural artery, controlled the circulation in the femoral artery, at the same time that the collateral vessels suffered little or no compression. After a trial of several weeks, the patient could not be persuaded that any advantage was gained. The tumour, however, had obviously diminished, and its contents had acquired a firm consistence. The patient complaining that his health and spirits were suffering by the confinement and low regimen, it was determined to operate. In this case, two ligatures were applied, though our author considers, that little or no advantage is thereby gained, but that, on the contrary, the second ligature may prove an additional source of irritation. He proved a very troublesome patient—much constitutional disturbance ensued—but he was ultimately discharged cured, the knee-joint being still very stiff, but the tumour much diminished. He was afterwards seen in good health and the tumour quite gone.

The fourth case was very similar to the foregoing. Preparatory treatment was employed, and the operation succeeded perfectly.

The fifth case was an aneurismal tumour on the posterior part of the right fore-arm, for which Mr. Todd tied the brachial artery, at about two inches above the internal condyle of the humerus, when the pulsation in the tumour, and in the radial and ulnar arteries, immediately ceased, the pain, also, greatly subsiding. This patient perfectly recovered.

In a subsequent part of the volume, Mr. Todd has related a case of unusually large aneurism of the right axillary artery, in which the subclavian was tied.

Experiments and Observations on the Fifth, Seventh, and Eighth Pair of Nerves,

(Concluded from page 331.)

Experiment 6.—The same horse was thrown next day, and the par vagum exposed in the neck on one side, and insulated from its cellular connexions,

but carefully retained in its place. It was repeatedly transfixed with a pin, pinched, and slowly cut with scissars, and not the slightest degree of sensation was manifested. When pulled out from its natural position, or squeezed by the forceps, the animal appeared to wheeze, as in obstructed respiration, but exhibited nothing like the twitches and startings which peculiarly mark the production of pain in irritating sensible nerves. This experiment was not repeated, because it confirmed similar observations made in performing numerous experiments on the eighth pair of nerves, for objects of a different kind.

These experiments have been thus fully and minutely detailed, because truth cannot be rendered apparent without a full view of all the circumstances collectively. It will be observed that the different trials were of the same kind, and produced the same results, having been varied only in the order of their succession.

Physiologists may judge for themselves whether the facts detailed bear out the following conclusions:

1. The fifth pair of nerves is highly sensible, and bestows sensibility to the integuments of the face and lips generally; and, when divided, all sensibility ceases in the parts below the division to which this nerve distributes branches; and thus the lips lose their natural degree of tone and adjustment, but are rendered altogether motionless; and the nasal cartilages continue their action in hurried breathing, although they are deprived of feeling.

2. The portio dura of the seventh nerve is entirely devoid of sensibility, and conveys none to the parts supplied with its branches. It influences the muscles of the face and cartilages of the nostrils, and the actions of the lips; for, when this nerve is divided, all those parts to which its branches are distributed become paralysed. If divided on one side, then the face is drawn to the opposite side, the muscles having lost their balance of action in the proper adjustment of the countenance,—sensibility still remains entire; but the lips, having been deprived of their moving power, hang loose and inactive, the lower lip falling quite away from the teeth, and exposing the gums to view.

3. The par vagum is entirely insensible. If compressed strongly or divided on one side, the wheezing produced indicates oppression in breathing, probably arising from loss of motion in some moving organs of respiration. When the division is made on both sides, this effect is more strongly marked, and becomes fatal.

4. So far as the above experiments go, they tend to prove that nerves have separate properties, and that these are in accordance with the different individual functions belonging to those organs to which their branches are distributed. They partly confirm experiments and observations already before the public, indicating this curious fact, that one set of nerves conveys the impressions of feeling or sensibility, and another influences motion; and that these properties are held individually and independently of each other. The peculiar purposes for which such a distinction may be designed appear to be open, as they have indeed given rise to much ingenious theory and speculation.

The author is aware that the sensibility of the eighth pair of nerves is questioned; and that, in opposition to his conclusion on this point, it is said the sensibility of nerves varies in degree and at different times. It has also been said that, as the larynx is highly sensible, it is to be presumed that the par vagum, which distributes branches to it, is a sensible nerve.

In answer to these objections, it may be observed that the result of the trials in the sixth experiment left no doubts on the minds of those present whatever: they were most decided in this case, and confirmed many repeated observations formerly made upon the same point, arising from phenomena too constant to admit suppositions and surmises to overbalance them. Whilst other nerves around appeared highly sensible, the par vagum, at the same time, exhibited not the slightest degree of sensibility. In regard to the last objection, also a surmise, it may be observed, that the sensibility of the larynx is probably derived from its investing membrane, supplied by other nerves, the eighth pair affording branches to its movable cartilages and muscles. If this view be correct, it tends to assimilate the eighth with the portio dura of the seventh nerve, as to their properties and functions.

Upon a review of all circumstances lately disclosed by experiments upon the nerves, it seems to be clearly and satisfactorily made out, that, wherever we can trace nerves sufficiently near their origins to find them alone and unconnected with others, they indicate distinct and separate properties; that is to say, a nerve which influences muscular action does not receive and convey impressions of felling, and one that partakes of the latter property does not influence muscular motion: and this distinction seems to be governed by the peculiar functions of those parts or organs separately and individually belonging to them, to which different nerves are appropriated; and thus the full exercise of nervous influence causes all the functions of an organ to play, whilst a suspension or destruction of power in any one nerve, by forcible pressure or division of its original trunk, robs that organ which it may supply with branches of one of its functions, without injury to another. Hence, where more than one function is performed by any part of the body, it receives the branches of so many nerves as correspond with the number of its functions, and which, although they may travel together in the same sheath, possess different properties independently of each other, according to the functions of the different textures over which they are finally distributed.

Cases of hemiplegia, and other sources of paralytic affection from accident or disease, frequently illustrate the distinction, and coincide with the phenomena of the above and similar experiments.

Great Marlborough Street, April, 1823.

An Experimental Enquiry on Poisoning by Oxalic Acid. By Robert Christison, M. D. *Professor of Medical Jurisprudence in the University of Edinburgh, and* C. W. Coindet, *M. D. of Geneva, Member of the Med. Chir. Society of Edinburgh, &c. Read before the Med. Chir. Soc. of Edin. Jan. 8th, and Feb. 5th*, 1823.—*(Ed. Med. and Surgical Journal.)*

(Continued from page 171.)

In Nos. 11, 12, 13, and 14, of this Magazine will be found the substance of the above minute and well-conducted enquiry; we shall now lay before our readers the various experiments with their respective results—all of which were several times repeated. It may be proper also to remark that those now given are chosen from a list of nearly forty cases; and are described very nearly in the same words as those employed in the original reports, taken while each animal was under the action of the poison.

The two first experiments show the effects of the concentrated acid on the stomach, and the changes produced in those effects by dividing the conjoined pneumo-gastric and sympathetic nerves.

Experiment 1.—Into the stomach of a full-grown dog, weighing twenty pounds, half an ounce of oxalic acid, dissolved in an ounce of tepid water, was injected by an aperture in the œsophagus about the middle of the neck, and immediately afterwards a ligature was applied below the incision. The animal had fasted about sixteen hours.

2′. He began to make violent efforts to vomit, which were frequently repeated, till

12′, when they ceased; and the breathing became full and frequent; sensibility unimpaired; great restlessness.

16′ 30″. Breathing short, and at times suspended for a few seconds; he then hung the head in a peculiar manner, looked very dull, lay down on the side, and would not rise when stirred; at last, when he was set on his legs, he walked easily across the room; suddenly the breathing became very quick and short, and then ceased, although the chest was quite relaxed; he staggered a few paces, and sank down on the side at

20′, motionless and senseless; the body was now spasmodically extended for a second or two, after which he made a few convulsive gasps; no pulsation could be felt in the region of the heart after the 20th minute.

21′. Death being complete, the body was opened without delay. The heart was distended in its pulmonary

cavities, and not contractile; the blood in those cavities was dark, in the aortal florid, in both fluid, and coagulated almost immediately in loose clots. The stomach was removed, and washed four minutes after death. It contained a small quantity of dark-brown fluid, of a thick and oily consistence; and its inner surface was lined with a large quantity of transparent mucus, not inspissated. The epidermis of the villous coat was wanting around the cardia, likwise on the whole posterior surface, and in patches on the anterior surface; and where it remained it was brittle, less adhesive, greenish-white on the middle of the interstices, and brownish-yellow on their margin. Where it was wanting on the posterior surface, there was considerable vascularity, and streaks of very black granular extravasation confined to the substance of the corion of the villous coat; and a ring of this granular extravasation surrounded the pylorus, which was excessively contracted. A very thick layer of white matter adhered firmly to the first six inches of the duodenum. The epidermis of that part of the gut was thick, and somewhat brittle. The internal coat of the œsophagus below the ligature, was corrugated, greyish-white in colour, but quite entire and strong.

Experiment 2.—In a full-grown dog, weighing 30 pounds, about half an inch of the conjoined pneumo-gastric and sympathetic nerves was removed on each side of the neck. Much anxiety and dyspnœa, and slight efforts to vomit, followed the operation. When he had remained at rest for half an hour, the breathing became easy and slow, but very deep. We then injected half an ounce of oxalic acid into the stomach, in the same manner as in the last experiment.*

Immediately he expressed great agony; but it is doubtful whether this should be attributed to the effects of the poison. For we were obliged to lay him on his side to inject it; and we have uniformly observed, that, in this posture, animals which have had the pneumo-gastric nerves divided, suffer so much from dyspnœa, that, in a short while, the tongue becomes very black.

When let loose, he seemed to suffer much, and was very restless.

20′. At times he breathed for a few minutes fuller and quicker, and became more restless. He seemed to labour under a peculiar dulness of sensation; did not stir when lashed, or even when pricked in the hind legs; yet was perfectly sensible when called, and walked easily, without stiffness or paralysis. He had never the slightest effort to vomit.

35′. Every respiration seems to be attended with agony.

40′. The breathing continued to be at intervals fuller and more frequent, and at that time there seemed to be an increase of uneasiness; some tremor of the thoracic muscles, sensible to the hand only.

1h. He was quite sensible, walked easily, though deliberately, and tried to escape; he was somewhat restless; the breathing had become regular, easy, full, and about 6 in a minute.

2h. 15′. He was less restless, and quite sensible, though dull and feebler; he walked deliberately, but staggered a little; the breathing continued quite regular, deep, and was 11 in a minute: the heart could not be felt pulsating; the thoracic muscles were still tremulous.

2h. 30′. No change; he was then left, and at

5h. 30′ was found lying on the right side, quite insensible, with the extremities spasmodically extended, and making his last convulsive gasps before death.

The body was examined 40 hours after death. The lungs were spotted

* We may notice here in general, that whenever the poison was introduced into the stomach in the subsequent experiments, the animal had fasted about the same time as in last experiment (sixteen hours), and the œsophagus was in like manner secured by a ligature.

black on the right side, on which he lay; and on the mediastinal surface of the left side; and of a uniform faint scarlet colour on the costal surface of the left side. Their internal structure was somewhat gorged at the depending part of each lung, but elsewhere quite natural. The blood in the heart was dark, very nearly of the same tint in both systems, and loosely coagulated. The stomach was externally somewhat injected with dark blood. It contained a large quantity of thick, greenish-black matter, and a ball of hair. Internally, the greater part of the villous coat was strong and entire; but near the cardia, a portion on the posterior surface had its epidermis soft and brittle. The whole posterior surface was of a very black colour, from blood extravasated in the villous coat, and altered by the acid. The rest of the tunic was covered with scarlet specks, faint on the fundus and middle portion, and very bright around the pylorus. The duodenum was healthy.*

(*To be continued.*)

Cases of severe Burn, with Dissections and Remarks. By WILLIAM CUMIN, M. D. *one of the Surgeons to the Royal Infirmary, and Surgeon to the Asylum of Lunatics, Glasgow.*

The author states that it occurred to him the following cases of burn might not be unworthy the attention of professional readers, as they tend to establish a point in the pathology of that injury that may serve to explain its frequent fatality, and perhaps, he adds, to open up interesting views respecting the action of powerful external stimulants on the cutaneous surface, and with the professed object of inducing more frequent depletion than hitherto has been usually resorted to in such cases, &c. &c.

Case I.—M. Y. ætat. 8, was admitted into the Royal Infirmary, November 5, 1818, having her neck, left cheek, arm and breast, left side of the abdomen, and right shoulder, much scorched. The surface was red, and in many points covered by small vesicles. The palm of the left hand and the thumb, particularly the latter, had also suffered severely. She was languid and chilly, with cold feet; pulse quick and small, respiration rapid, tongue clean, with urgent thirst. Vinegar had been applied immediately after the accident; turpentine dressings; a little wine occasionally; anodyne at bed time.

She continued in this state of collapse during the two succeeding days, until the 8th. when I found that symptoms of reaction had rendered it necessary, in my absence, to diminish the quantity of wine allowed. Her face was now flushed, pulse 128. On the succeeding day, in addition to these symptoms, she complained a good deal of her chest and back. On the 11th, the pulse was 124, face flushed. Several sloughs had formed over the chest, and the thumb appeared completely sphacelated. The discharge from the burned surface was not yet purulent. On the succeeding day, the pulse had risen to 132, and she complained much of head ache, which however was readily relieved by shaving the head, and bathing with vinegar. An extensive slough formed over the left shoulder; and on the 15th, a separation of the sphacelated parts began to take place, although with only a scanty discharge of matter. On the 16th, the pulse was 128; face flushed, much pain in the back of the head, and she had now a frequent hard cough, with pain on deep inspiration.—A dose of calomel was ordered; vinegar cloths to the head; wine intermitted. On the 20th, great relief had been experienced from exchanging the turpentine dressings for spermaceti ointment. Her pulse was 120, and so

* We have always found less corrosion in the stomach when the nerves had been divided; and in the case related above this is the more remarkable, when we consider that the body was left 40 hours before examination. The reason is, probably, that the animal lives long enough for a great portion of the acid to be absorbed, so that no corrosion takes place after death.

feeble, that I allowed her a small quantity of wine, to be given with caution.

On the 23d, the pulse was 116; she had passed a good night, and felt easy; her appetite was improving. The greater part of the sloughs had now separated; and the ulcerated surface extended to more than half the trunk of the body, from the pelvis to the throat, and over the whole of the left arm. On the 10th of December, she had continued to lose ground since the beginning of the month, in consequeuce of purulent discharge and colliquative diarrhœa. A considerable slough had formed in the right haunch. The ulcers were this day of a livid appearance, and the countenance much sunk. Dissolution took place in the evening.

On inspection, the left pleura pulmonalis was found adhering firmly to the pleura costalis, throughout its whole extent. Some thin membranous adhesions were observed in the right side of the chest. The lungs and abdominal viscera appeared healthy.

Case II.—J. N. ætat. 4, was admitted into the Royal Infirmary, November 16th, 1822, having the inner side of the left arm and thigh, with the hypogastrium and chin, severely burned, by her clothes catching fire the preceding night. On the arm and thigh, vesication had taken place; but the cuticle on the chin and abdomen had been rubbed off, leaving the skin of a dusky hue.—Turpentine dressings.

On the 21st, after a restless night, she fell quiet at four in the morning; and at half-past nine her face was observed to be livid, and her breathing somewhat stertorous, pupils much contracted, pulse frequent, and almost imperceptible at the wrist. Although a considerable quantity of blood was procured from the temples by leeches, no relief followed, and she died at 1, *p. m.*

On inspection, the pia mater was observed in many places morbidly vascular, with several patches of extravasated blood in different parts of its surface. The vessels of the velum interpositum and plexus choroideus were very turgid. An ounce of bloody serum lay in the basis of the scull. About two ounces of serous fluid were observed in each side of the thorax: a little fluid in the pericardium; lungs healthy. The peritoneal coat of the small intestines exhibited in many places a blush of inflammation. Three ounces of serous fluid were taken from the cavity of the abdomen.

(To be concluded in our next.)

Case of Rupture of the Internal Coats of an Artery. *By* JOHN LIZARS, F. R. S. E. *Fellow of the Royal College of Surgeons of Edinburgh, and Lecturer on Anatomy and Physiology.*

The following case, as it illustrates the manner in which nature stems the bleeding of a great vessel, and consequently as it elucidates an important branch of pathology, I beg you will insert in your instructive Journal. The gentleman, who is the subject of it, was travelling on the North-road as an outside passenger of the mail-coach, when, about five miles from town, the coach was overturned, and his leg got beneath the iron railing. The coach was dragged for a short distance while his limb was in this position, so that it was severely lacerated. The coach being raised, he was lifted inside, and carried four miles onwards to the inn at the end of the first stage, where it was discovered that he had been bleeding freely, and that his leg was dreadfully shattered. When Mr. Low, the surgeon of the village arrived, he found the ham of the left leg completely exposed to the bone, and exhibiting the living nerves, blood-vessels and muscles, as if they had been displayed for demonstration. The popliteal artery felt like a cord, had no pulsation, and the leg below, or distad, was cold and lifeless. The skin was ruffled down to the ancle-joint like a

stocking. This intelligent surgeon saw at once that there was no alternative but amputation; and as his patient was still shivering from the contusion, a messenger was sent to Edinburgh for further assistance. When I arrived about 5 o'clock in the morning of Sunday the 12th of January, the accident having occurred at midnight, I found the patient as above described, suffering excruciating pain; and that re-action had taken place within half an hour. As my opinion coincided with Mr. Low's, amputation was immediately performed about four inches above the condyles of the *os femoris;* the patient put to bed and an opiate given. Considerable fever followed, for the removal of which the lancet was twice used; and the day after the operation so profuse a suppuration came on, that on the following day, it was necessary to dress the stump. The discharge continued, appearing to descend from the region of the groin, and was so copious as to bring on hectic symptoms; these, however, soon subsided, by bandaging gently from the groin, applying warm emollient poultices to the stump to subdue irritation, and by the administration of diluted sulphuric acid, and light nourishing diet.

The cancellated surface of the bone was involved in the ulceration, and, after all irritation had subsided, a portion about a fourth of an inch in thickness was removed. The wound soon granulated, and formed an excellent stump. There was no other peculiar feature in the case; the patient got out of bed on the sixth day, was hopping about in the course of a fortnight, and has now returned to his friends.

Previous to examining the amputated limb, I attempted to inject the popliteal artery from the upper or proximal orifice, but little or no injection entered. I then traced the artery, and found the articular branches and those to the heads of the *gastrocnemius externus* muscle with open mouths, except one which had a clot of blood in it. On arriving at the division of the popliteal artery, the anterior tibial, the posterior tibial and fibular branches, were empty and collapsed. The trunk of the popliteal, immediately above its division into posterior tibial and fibular arteries, was then laid open upwards, when the serous and muscular coats were found ruptured across, a portion of them insulated and plugging up the vessel, a clot of blood proximal in the artery, and blood effused in the cellular coat, which had remained comparatively sound and entire. The integuments were detached downwards to the ancle-joint; the muscles, both on the anterior or patellar, and on the posterior or popliteal aspects of the leg, were distended with effused blood; several parts of the cellular substance were also injected with blood, and a considerable quantity of blood was found in the knee-joint. The ham was exposed to the depth of the popliteal ligament and distad, or downwards to the heads of the *gastrocnemius internus* muscle. The posterior tibial and peroneal nerves were entirely exposed; so were the popliteal vein and artery, which were loosely insulated. Several muscular veins, together with the *saphena minor*, were lacerated; and the heads of the *gastrocnemius externus* were extensively injured.

The effect of the contusion of this artery corroborates what has been advanced by Dessault, Morand, and Petit. We have here, first, the rupture of the two internal coats as proved by Dessault, Bichat, Drs. Thomson and Jones; secondly, the '*crispation*' of Morand; and, thirdly, the clot of blood, both internally and externally, or the '*couvercle*' and '*bouchon*' of Petit,--all contributing to stem the hemorrhage, and prevent instant death. The muscular branch, which had the clot of blood in it, also shows the method which nature adopts to sup-

press bleeding. There was no coagulated lymph, as the *vasa vasorum* and vessels of the sheath of the artery were destroyed.

Edinburgh, 39, St. Andrew's Square, 20th March, 1823.

Case of Sanguineous Tumour of the Breast, related by Mr. Briggs, *Surgeon to the Public Dispensary, and Assistant to the Lock-Hospital, in the Appendix of Notes to the Translation of "Remarks and Practical Results of Observations on Schirrus and Cancer," by* Antonio Scarpa, *Professor of Medicine. Pavia. (Med. Ch. Rev.)*

"1810, October.—Mrs. Allardice, a single woman, aged forty-five, a patient of the Public Dispensary, had a tumour in the left breast, extending from within a short distance of the nipple towards the axilla, which originated, as she stated, about eighteen months before, like a small moveable kernel under the skin, sometimes painful when the arm pressed upon it during sleep. Within the last three weeks a fluctuation had been perceptible in it, and it had been judged by the late Mr. Crowther, to be of a cancerous nature.

"30.—The tumour was punctured with the point of a lancet, and about four ounces of a dark and inodorous fluid was discharged from it in a jet, resembling in all respects, except the circumstance of its not coagulating spontaneously, venous blood, and on examination appeared to consist of the serum, with the colouring part of that fluid only.

"On the third day following, the tumor was found to have filled again; a considerable quantity of bloody fluid having flowed from the orifice in the interim, some of which was effused into the cellular membrane, producing ecchymosis of the surrounding skin. The part felt hot and tense, and the pulse quick. From this time until the operation, a period of thirty-one days, the orifice burst open several times and discharged a large quantity of the same kind of fluid, the tension taken off by this means affording her relief from the pain occasioned by its pressure. The alarm that she felt at the repeated discharges of blood which took place at intervals, and which became more frequent and profuse, induced her to submit to the removal of the diseased part.

"Dec. 4.—An elliptical incision was made through the integuments covering the tumour about four inches and a half in extent, and the whole of the indurated part dissected out, laying bare, by this means, a part of the pectoral muscle and the strong fascia covering the serratus magnus. Immediately below the edge of the former muscle, running in the same direction, and upon this fascia, a large venous trunk was exposed, which bled profusely. Struck with the unusual size of this vessel, it was immediately considered to be the source from which the tumour had originated as well as the hemorrhage which had taken place subsequently to the puncturing of it. A ligature was accordingly applied upon it, and the lips of the wound brought together in the usual manner.

"Every thing seemed to go on well until the ninth day from the operation, when, to my great disappointment, I found the patient complaining of unusual pain in the wound, from which there was a profuse discharge of a very highly offensive bloody sanious fluid; and on removing the dressings, the lips, particularly towards the axilla, were found to be forced apart by an accumulation of grumous blood.

"Notwithstanding these unfavourable appearances, from which I had apprehensions of the failure of the operation, the sanious bloody discharge which took place from it gradually diminished, and in the course of eight or nine days had entirely ceased. In about six weeks from the time of the operations the parts were perfectly healed.

" This woman continued in an apparently good state of health for eight years afterwards, without any appearance of relapse of the local complaint, and died of sudden illness in St. Bartholomew's Hospital, in the autumn of 1818.

" In the centre of the tumour, when examined, a cavity was found capable of holding three or four ounces of fluid, the inner surface of which presented a number of rugæ or irregular folds, not unlike those of the corrugated inner surface of the bladder, or the auricles of the heart, forming small interstitial cells or foveolæ, communicating with the principal cavity; the entire parieties of the cavity, which were about one-third of an inch in thickness, as well as the small cells formed in the sides of it, were found to consist of depositions of successive layers* of coagulable lymph. A small portion of the glandular part of the breast had undergone some change in its texture, but had no communication with the cavity before-mentioned, and probably arose from pressure made upon it in consequence of its contiguity with the principal diseased part.

" From this account it is evident that the disease originated in the vascular and not the glandular part of the breast; that the bloody fluid contained in the sac was derived, in some manner or other, from the enlarged venous trunk before-mentioned, although the mode of communication cannot be demonstrated, no opening being found in the sac, as far as I could discover, similar to what is met with in aneurismal tumours or ruptures of the vein. It is reasonable, also, to conclude that the obliteration of this vein by the operation put a stop to the further progress of the disease. The formation of the sac by layers of coagulable lymph, and the want of this property in the fluid contained within it appear to admit of an easy explanation, upon the supposition of the extravasation and lodgment of blood for some time in the breast, and the consequent spontaneous separation of its constituent parts.

" In all the leading circumstances this case will be found to bear a strong resemblance to the histories of ' Collections of Bloody Lymph in the Breast,' recorded by Dr. Monro, with which it ought to be compared, as well as that related by Richter, which, though, in some respects different, appears, in my opinion, to have been of the same character."

* " A tumour in the breast, in which there is a cavity similar to this, is preserved in the Museum of the College of Surgeons, but unfortunately without any accompanying history to explain it."

Fatal consequences resulting from Slight Wounds received on Dissection. By A. Colles, M. D.

This is a subject we have more than once adverted to in the course of our labours, (vide Nos. 1 and 9 of this Magazine;) and, as the consequences of these accidents are not only formidable in their nature but of more frequent occurrence than heretofore, we deem them too important to omit giving them a place among our select miscellanies.

Case 1.—" Mr. Hutchinson, one of Dr. Colles' pupils, received a slight scratch while opening the body of a man who had died of cynanche laryngea. The cellular membrane on the external surface of the larynx and pharynx of the deceased contained that amber-coloured fluid resembling melted jelly, which is so often met with in such as have been carried off by this disease. The scratch on the thumb was very slight, yet the gentleman was that evening drowsy, and awoke next morning with head-ache, sickness of stomach, and acute pain in the shoulder and axilla of that side. On the third morning, the pain had increased to an extraordinary degree, and was still confined to the shoulder-joint, but without any discolouration of the integuments.

There were no inflamed lymphatics on the arm, nor enlargement of the axillary glands. Yet he suffered exquisite pains about the clavicle and axilla, on the slightest pressure being used. The scratch on the finger at this time was quite free from inflammation, but the cuticle was raised in a small vesicle, partially filled with a white milky fluid. In this state he continued for three or four days, in agonizing pain, violent fever, and great mental despondency. Fomentations, leeches, opiates, afforded no relief. At length, some mitigation of the pain took place, and a diffused erysipelatose redness spread along the thorax and abdomen, down near to the ilium, and ultimately to the trochanter. The skin had a doughy feel, and retained the impression of the finger. The fever continued unabated, and the strength was nearly exhausted, being only supported by large quantities of wine. Incisions were made over the fourth and fifth ribs, with the hope of finding some collection in the cellular membrane, but none was discovered. In a few days more, the inflammation ceased to extend, the cuticle began to desquamate, and the pain to diminish. At the end of three weeks from the accident, the pain had nearly subsided, and his general health was improving; but, in a day or two, pain and swelling appeared in the arm, and soon became almost insupportable. Some matter formed, and was discharged by an incision. The inflammation, also, re-appeared in the side, and ended in a small abscess. After this, the patient rapidly recovered, and went into the country.

"From the commencement of the disease his spirits were sunk; he frequently raved; his pulse throughout was never less than 120, and sometimes it was 130. His stomach was, at the commencement, very irritable, and got better; but it again became alarmingly irritable about the beginning of January. This might have been partly caused by the large quantity of opium he used, for he could not procure any relief, except by a large dose, amounting to a drachm, or four scruples of the tincture daily." 207.

Case 2.—The second case was that of Mr. Dease, the late lamented and estimable Professor of Anatomy and Surgery to the Royal College of Surgeons of Dublin. On Saturday, the 13th of February, 1819, he lectured on the cervical nerves, the subject being a female, not more than 48 hours dead. On Sunday morning early, he awoke with a violent shivering and sickness at stomach, which lasted two hours. At eleven o'clock, he earnestly besought Dr. Colles to bleed him for a pain in his left shoulder, which was most excruciating. Dr. C. declined bleeding him till three o'clock, when urged again, he took away nearly twenty ounces of blood from his arm by a large orifice. He experienced partial relief at the beginning of the bleeding; but at nine, there was no essential mitigation of his sufferings. The fever was as high as ever. The blood was neither buffed nor cupped. Dr. C. now observed a slight fulness above the clavicle, and on pressing it with his thumb, the pain became exquisite. On the 15th at eight o'clock in the morning, Dr. Colles visited Mr. Dease, and found that he had had a bad night, owing to the pain in the shoulder, on which he had now nearly one hundred leeches. In a consultation, some aperient medicine was ordered, which operated but little, and did not reduce a fulness of the abdomen, which was now conspicuous. 16th of February, the bowels had been more satisfactorily relieved, but, with little diminution of the general symptoms. He was advised to continue the use of purgatives. In the evening of this day a colourless swelling was discovered on the side of the thorax, and this, for the first time, led to the suspicion of a dis-

section wound, of which Mr. Dease had no recollection. Dr. Colles discovered on the dorsum of the thumb, the mark of a slight scratch which formed the diameter of a vesicle half filled with a milky fluid. The pain in the shoulder was now easier, and he could better bear pressure about the clavicle. Every evening, about six o'clock, he had an exacerbation of restlessness, and depression of spirits. 17th. A bolus of calomel, with a liquid purgative draught. 18th. The medicine had operated well, and he slept four hours after taking the draught, awaking cheerful and refreshed. To have an anodyne draught at bed time. 19th. Passed a bad night, and has some delirium this morning—face has a yellow tinge—countenance sharp—pulse small. The incision where he had been bled, was inflamed in the ordinary way, and there was a small vesicle on the fore-arm, two inches below the incision, containing a milky fluid. 20th. His manner was quick this morning, and bordering on delirium—pulse 126 and smaller—the entire side, from the axilla to the hip, swelled, and studded with small elevations, appearing like vesicles, but feeling hard to the touch. There was a strong erysipelatous blush occupying a small portion in the middle of the swelled side—tongue white; abdomen full. 21st. There appeared to be an abscess, but without distinct fluctuation, near the axilla; and there was a tumour on the anterior part of the right arm, which they agreed to puncture, though the patient was fast approaching to dissolution. A small quantity of serous fluid escaped, but did not reduce the swelling. He died at ten o'clock that night. There was no dissection of the body—nor indeed could it have been of any use.

The third case is only an outline. Mr. Egan had employed himself in dissecting the body on which Mr. Dease had lectured, and on the same day, viz. Saturday, 13th of February. On Sunday evening he had a rigor followed by a febrile paroxysm. On Monday, though not well, he went into company. On Tuesday he had a hoarseness, and inflammation attacked the thumb, with pain and erysipelatous redness around it, the pains passing up along the back of the fore-arm, attended with a smart degree of fever. On Friday he complained of tenderness under the border of the pectoral muscle, where an enlarged gland could be felt. His chest appeared to be seriously affected. On Sunday, the 28th of February, Dr. Colles saw him—fever running very high—pulmonary affection and distress very great. The abscess near the axilla was now opened and discharged some purulent matter, the cavity proving to be extensive, passing across the pectoral to the latissimus dorsi muscle. He gradually recovered.*

(To be continued.)

Proceedings of Philosophical Societies.

ROYAL SOCIETY.

May 29.—At this meeting, the reading of Mr. W. S. Harris's Account of a Magnetic Balance, and of some recent Experiments on Magnetic Attraction, was resumed and concluded.

The construction of the magnetic balance is analogous to that of the electrical balance, described by Mr. Harris in his Observations on the Effects of Lightning on Floating Bodies, lately published: the experiments made with it were on the laws which govern the force of attraction in magnetized bodies, under different circumstances of distance, &c.

At this meeting, also, the reading of the following paper was commenced: A Case of Pneumato Thorax, with experiments on the absorption of different kinds of air introduced into the pleura; by John Davy, MD. FRS.

June 5.—The reading of Dr. Davy's paper was resumed and concluded.

The case described by Dr. Davy was one of pthisis pulmonalis, which proved rapidly fatal, owing to the supervention of pneumato thorax. A few hours after death, the chest was perforated under water, and nearly 226 cubic inches of air were collected from the right pleura, into which it had passed by means of an ulcerated opening communicating indirectly through

* (Vide Dr. Pett's Case.)

a vomica with the bronchia. This air was found to consist of azote and carbonic acid; about 94 of the former, and 6 of the latter.

For the purpose of elucidation, Dr. Davy described the results of a number of experiments which he had made on dogs, proving that different gases introduced into the pleura are absorbed with different degrees of rapidity. Nitrous gas, nitrous oxide, oxygen, and hydrogen, soon disappearing, carbonic acid gas more slowly, and azote slowest of all.

Some of the experiments gave rise to the idea that azote was effused into the pleura by the secernent arteries. This subject is discussed by Dr. Davy in connexion with the consideration of the air occasionally found by anatomists in different parts of the body. This air, for reasons which he assigns, he thinks is azote. He does not believe that it is carbonic acid gas, because he has not been able to detect the slightest traces of this acid in blood either by means of a high temperature, or the vacuum of an air-pump, and because blood contains alkali not saturated with this acid, and is able, in consequence, to combine with an additional portion of it.

At this meeting a paper was also read, on Fossil Shells; by L. W. Dillwyn, Esq. FRS. in a letter to the president.

This paper principally related to the geolocial distribution of turbinated univalves.

At this meeting likewise, the reading of the following paper was begun: Observations and Experiments on the Daily Variation of the Horizontal and Dipping Needles, under a reduced directive Force; by Peter Barlow, Esq. of the Royal Military Academy, FRS. *elect.* (Communicated by Davies Gilbert, Esq. Treas. RS.)

Marsh Miasmata.

The last number of the Transactions of the Royal Society of Edinburgh (Vol. ix. part 2), contains a paper "on Marsh Poison," from the pen of Dr. Ferguson of the Army Medical Staff, whose name is familiar to our readers.

In this paper, Dr. Ferguson undertakes to prove, that the opinions generally entertained with respect to the nature and origin of "pestiferous miasmata" are erroneous; and although we cannot go along with him in all the conclusions he has come to upon this point, yet we do think he has made out a strong case, and has said enough to show that the subject requires further investigation.

Investigation, however, to be useful, must proceed upon some undeniable principle, and must have for its object the solution of some question or questions wh really admit of proof, and which, at same time, have reference to the cure prevention of disease.

The first step, therefore, in an inqu of this kind, must be, to establish, by cautious induction of facts, the actual istence of such agents as "pestiferous asmata;"—which being done, the inqui may then proceed to the investigation the following questions, which are framed as to admit of the highest spec of proof which can be brought to b upon a subject of this nature, and whi at the same time, involve the considerati of every interesting and important f connected with the origin and influence pestiferous miasmata.

1. Under what circumstances have pes ferous miasmata been observed to ar from the surface of the earth?

2. What diseases have such miasma been observed to produce in the hum frame?

Prize Essay.

The London Medical Society have pr posed *Diseases of the Spine* as the subje of a Prize Essay for the present year. T prize is a Gold Medal, value 20 guineas.

The subject proposed by this learn body last year, was, it may be remembere *Dropsy:* but one Essay only having be received on this subject, (forwarded Dr. Clutterbuck), the adjudication the prize has been deferred until Mar 1824, so that there are really two priz to be competed for this year.

Lord Chamberlain's Office, July 1.—D Henry Southey, Fellow of the College Physicians, is appointed Physician in O dinary to his Majesty.

MARRIED.—On Thursday morning, St. Giles's, Cripplegate, by the Rev. W Holmes, Mr. John Lathe, of Fore-stree Surgeon, to Augusta, youngest daughter the late Mr. J. Daker, Whitecross-street

DIED.—On the 30th ult. at George R binson's, Esq. Princes-street, Bank, E zabeth, youngest daughter of the late Jo Rotheram, M.D. of Newcastle-upon-Tyn and sister to the late John Rotheram, M.D Professor of Natural Philosophy in t University of St. Andrew's, and of Cap Rotheram, R. N.

London:

Printed by E. JUSTINS, 41, *Brick Lan Spitalfields.*

Published by COX and SON, St. Thomas's Stree and 39, High Street, Southwark. Sold also Sherwood, Neely, and Jones, Paternoster Row Simpkin and Marshall, Stationers' Court; Joh Cox, Berner's Street, Oxford Street; W. Stev art, South Bridge Street, Edinburgh; Hodg and M'Arthur, Dublin; &c. &c.

THE WEEKLY

MEDICO-CHIRURGICAL & PHILOSOPHICAL MAGAZINE.

No. XXIII.] SATURDAY, JULY 12, 1823. [*Price 4d.*

" FLORIFERIS, UT APES, IN SALTIBUS OMNIA LIBANT
OMNIA NOS, ITIDEM, DEPASCIMUR AUREA DICTA."

DR. GALL.

OF ILLUSIVE LIBERTY.

THERE neither can nor ought to be admitted any other liberty, than that which is in accordance with the general laws of nature and with the nature of man. We have seen that an unlimited and an absolute liberty are in contradiction with a created and dependent being. The liberty that ought to be recognized, should consider man as a being submitted to the laws of cause and effect; this liberty makes the individual and the institutors responsible for good and evil; in this liberty, our acts ought to have the power of being worthy or unworthy; the developement of this liberty should carry with it the full conviction that it depends, not only upon organization, but likewise upon the influence of external things, that man becomes more or less master of his actions; and that social institutions, education, morality, religion, laws, punishments, and rewards, are eminently useful and indispensable. A liberty, with all these characteristics, is a moral liberty.

Moral liberty is the faculty of being determined, and of determining by motives;* or, in other words: liberty is the power of willing or not willing, after deliberation.†

It is this liberty which has been the subject of the lessons of the ancient philosophers and judges, the only one whose application to social life and to every individual has the most extended influence. The morality and religion of every nation only in themselves suppose this kind of liberty, since their sole object is to furnish us with the most powerful and most noble motives to direct our actions.

There are then two principal points to be considered in moral liberty: the faculty *of being determined*, and the faculty of *determining oneself* according to motives.

To elucidate these two points, it is necessary in the first place to remove a difficulty which results from my two previously proved propositions, that all our dispositions, propensities and talents are innate, and that their manifestation depends upon organization. It is asked how far moral liberty can conciliate itself with those two truths?

It is true that man cannot change his organization nor the results which are immediately dependent upon it. Neither has he any controul over accidental impressions from without. Thus, when, in consequence of his organization or from external irritation, there awakens within him, sensations, propensities, sentiments, ideas, wishes, he should be considered, as far as regards these impressions, desires, propensities, &c. as the slave of his interior and of the external world.

Each organ called into action gives him a sensation, a propensity, a concourse of ideas, and under this relation he has no controul over himself but in as far as he can prevent or produce the action of the organs. As it is impossible for him not to feel hunger, when his stomach acts in a certain manner, upon the same

* Bonnet, Palingen, t. i. p. 27.
† Laromiguiere, t. i. p. 110.

principle it is impossible for him not to feel the stimulus of the flesh, or any other propensity whatever for good or evil, when the organs of those propensities are in a state of excitation. It would then be unjust to make man responsible for the existence of such sensations, and desires, or to give him either personal credit or reproach for them.

But, the case is necessary, least a great fault be committed by confounding *the propensities* and *desires* with the *will*. To will is nothing less than to feel desires, as M. Richerand* finds it so admirably expressed, in the work of M. de Tracy; or, as Fichté says, it is the simple inducement of the faculties to act, and desire is nothing less than an action of the will towards a good which one is not in possession of.

The ancients named the desires, concupiscences, volitions or velleities, and carefully distinguished them from the will. Kant followed them with reason, and Condillac on this subject, with much justness, says, " as it does not depend upon ourselves not to have the wants which are a consequence of our conformation, neither does it depend upon us not to be inclined to do that to which we are determined by these wants.

It is again then in consequence of having confounded desires, velleities, concupiscences, propensities, with the true will, that these insolvable difficulties have been met with, relatively to moral liberty. It is right to negative the liberty as far as it regards the existence of desires, but a false consequence is deduced, when it is inferred from it that the will and the actions are both equally void of liberty. Desires and propensities, are the result of the action of a single organ, as I have demonstrated in treating of the origin of the moral qualities and intellectual faculties. The will, on the contrary, is a decision,—a determination produced by the examination and comparison of several motives.

Let us examine how man becomes capable of will, consequently of moral liberty; how he may be in opposition with his desires; and how this very will, this very liberty acquires a different extension in different individuals ?

Let us figure to ourselves a being endowed with a single organ; this being would only be able to perceive a single kind of sensations and ideas, and would only be capable of exercising a single kind of faculty. A similar unique organ might very well be put in action by internal and external irritations, and be accustomed to that action by frequent repetitions. But that individual would not be susceptible of any other sensation or idea. It would be impossible for him to compare ideas and sensations of a different kind, or to choose between them. Consequently as soon as the only organ would be called into activity, there would be no reason why the animal should not follow the propensity put in motion, or the idea awakened by that action; it would then be absolutely compelled, or rather it would be impossible for it to abandon itself to any other than this motive—this impulsion. The action or inaction of this being would simply come from the activity or inactivity of this single faculty. It is after this manner that the inferior animals are invariably limited to their aptitudes or their instincts.

As soon as the animals, as that takes place, particularly in the most perfect, are gifted with several organs, they are in like manner susceptible of different kinds of ideas and sensations. It is true, that, in this case, the action of one organ neither destroys the existence nor the action of another organ; consequently, neither is it capable of destroying the sensations and ideas of that other organ. But one organ can act with more

* Idéologie, p. 69.

energy, and furnish a more powerful motive. At the moment you present a famished dog with nourishment, and when he is upon the point of eating it, make a hare pass before him, and he will immediately pursue it, although his hunger has not been appeased. If violence be often employed to prevent this dog from running after the hare, he remembers the blows that await him, and although the ardour of his desire may occasion him to tremble and his heart to beat, he abandons the pursuit. Were the dog only susceptible of hunger, or if he had no other propensity or faculty but the chace, it would be impossible for him to act in this manner. It is then the plurality of organs that renders him susceptible of different ideas and sensations. But as those ideas—those motives are not of an exalted order, this faculty in an animal cannot be called moral liberty, or a real faculty of willing; it must be considered as a simple spontaneity or faculty of being determined by the strongest and most numerous irritations.

Let us now compare man with the most perfect animals. How much are the motives with which his more exalted organization has rendered him susceptible, are they not ennobled and multiplied! independent of the propensities and faculties which he has in common with animals, he distinguishes truth from error, the just from the unjust; he compares the present with the past, and reads in the future; he seeks and discovers the concatenation of causes and effects; he has the sentiment of shame and decency; he has sympathy and compassion, and can find out of himself the duties and moral obligations that he has to fulfil towards others; he is provided with internal organs for morality and religion, to know and to honour an eternal and independent being; his internal organization, his language, tradition, education, &c. guarantee to him an abundant source of knowledge, and furnish him with an infinitely greater number of motives than animals can have. By means of his reason, he compares ideas and sensations; he weighs the respective value of each; he can especially fix his attention on determined motives. From all these operations, decision at length results. It is this decision produced by reason and the examination of motives, which is properly the will and the willing by opposition with the propensities, desires, volitions, velleities, and the simple sensation of contentment.

It is now conceived in what manner man may have desires and propensities entirely different from his will, and in what manner his reason places him in contradiction with his desires. The senses are excited, man feels himself stimulated to obey this movement; but if he abandons himself to the desire of revenge, he knows, by means of his intellectual faculties that a base action will dishonour him, and that he will be looked upon rather as the slave of his passions than as the master of himself; should he throw himself into the arms of voluptuousness, the frightful image of his lost health and of his lost domestic happiness present themselves before him; social intercourse, the shame of abusing confidence, the sorrowful consequences for the object loved, &c. all these motives act upon his mind, and, either by force or their numbers, they make a finish by overwhelming him. It is by these means that man succeeds in wishing a thing absolutely contrary to that to which a very violent propensity had excited him.

Every one then must feel that, as long as propensities and desires are not called up and nourished by the participation of the individual, he cannot be rendered responsible for them; but he is so from his de-

termination, his will and his actions.* Thus it is and eternally will be true that the organs of the moral qualities given by the Creator are the principle of what we call sometimes propensity; at other times inclination, desires or passion, in proportion to the different degrees of energy of the action of these organs. It is generally agreed upon that in this respect the empire of man is restricted; it is not in his power to annihilate his propensities, nor to give himself inclinations at pleasure. But in the midst of the most ardent desires of man, if several faculties of a superior order, whose exercise is sustained by a perfect organization, are called into action, and join themselves to the external motives furnished him by education, laws, religion, &c. these very desires are overcome. The will which a man then manifests is no longer the action of a single organ.

It is the work of man gifted outwardly and inwardly with multiplied motives, and endowed with the faculty of comparing and weighing them, and of being determined or of determining himself in consequence of these motives. Now, it is indisputable that as long as man enjoys his senses, he can act in this manner, and that he frequently wishes and even does every thing contrary to what his propensities command him to do; consequently he is morally free. It is this liberty which makes man a moral being, and which gives morality and responsibility to his actions.

But do not let us believe that this faculty of willing or not willing, this moral liberty was given up to chance by the Creator.

The determination that takes place by motives, is also submitted to laws, so that, in the exercise of moral liberty, it can never be a question of unlimited or absolute liberty. The law of nature wills, for example, that the faculties of an inferior should obey those of a superior order; that living creatures should love each other, and consequently employ all their means and faculties to promote their happiness. "All men, says Pascal, desire to be happy. That is without exception. The will does not make the least step but towards this object. It is the motive of all the actions of men even to those who kill, and to those who hang themselves." Man then must necessarily desire a good and hold in horror an evil which he has acknowledged as such. If several motives present themselves, it is not in the power of man to decide indifferently for one thing or for another; but he determines in consequence of the laws of thought, after the motives that act most powerfully upon him, or which offers him the greatest good. Without this necessity, man, with all his moral liberty, would fall into unreasonable contradiction and contrary to the laws of nature mentioned when speaking of unlimited and absolute liberty.

This liberty nevertheless, conformable to the dependence in which we are placed in the creation, the laws of nature and organization, fulfils all the conditions that can be expected from an infinite but reasonable being. It not only makes those answerable who direct men, but also individuals for their actions; it is the only liberty that can be useful in life, and, as Locke says, the only one that is supposed to exist in all human institutions; whilst by admitting an unlimited or an absolute liberty, every effort tending to guide man would be folly.

When certain philosophers exact that good and justice, &c. should be practised, without any motive, but

---

* Nec tardum ingenium, nec labilis memoria, nec inquietus appetitus, nec sensus obtusus, nec vita langues reum per se statuerunt hominem, sicut nec contraria innocentum, et hoc non ab aliud nisi quia et hæc necessario et præta voluntatem possa prævenire probatur. (St. Augustinus, de liber arbit.)

virtue alone, far from destroying the necessity of motives, they present you with good and justice as the most sublime and worthy inducements to action. Every thing then proves, in all conditions of human society, no other liberty has been supposed than the power of being determined, and of determining oneself by the most powerful motives.

It is certain that every individual does not enjoy moral liberty in the same degree: how does this happen?

We have seen that the faculty of appreciating the motives of a superior order, constitutes the first condition of moral liberty. Now, all motives are drawn either from our own fund, in a happy organization, or from external circumstances. The more our internal faculties are restricted, the less they furnish us with the means of doing good or of eschewing evil; the more the noble faculties and sentiments predominate, the more also will the latter be counterbalanced, whenever their tendency becomes prejudicial. Thus, the man with great talents has more liberty than him who is inferior to him; and the more the faculties descend towards idiotism, the more also does moral liberty degenerate.

The second source of our motives is in external circumstances. The man who has fewest wants, will also be less tempted than the man who has most. The man formed and cultivated by education, morality, religion, and conversant with the laws and duties of society, will have infinitely more motives in his power than he whose heart and mind have been abandoned to ignorance and insensibility. In general, the greater the disproportion between the motives, whether external or internal, and the energy of the propensities, the more also the exercise of moral liberty becomes precarious.

(To be continued.)

Cases of Five Individuals in one Family having Small-Pox twice. By THOMAS BARNES, M.D. *Physician to the Carlisle Dispensary. (Ed. Jour.)*

Since the last Report of the Carlisle Dispensary was printed, five cases of small-pox after small-pox have come under my observation; and as vaccination and small-pox have lately excited a great deal of interest, I shall state to you, as briefly as I can, an account of them. They all occurred in a family of the name of Bottams, of Botchergate, Carlisle. The family consists of father, mother, and eight children. Five of the children had small-pox in the summer of 1818, and all of them had the same disease in February last. Jane began first; Margaret took it next; then Mary, Thomas, James, John, William and Ellen, were effected in succession. In all the cases, the eruption was preceded with the usual febrile symptoms in a greater or less degree. Jane, æt. 4, and Margaret, æt. 6. had a great number of pustules, and some of them were confluent. The face swelled, the eyes were nearly closed up, and there was considerable ptyalism. In both, the pustules were at the height on the 10th day; and both had secondary fever, which was accompanied with swelling of the hands and feet. Ellen, æt. 2, had very few pustules, and they gained their full size in about the same time. These three patients were never vaccinated, and never had small-pox before.

The following five patients had small-pox between three and four years ago. Mary, æt. 19, had a copious, but distinct eruption, which maturated about the 8th day; her face swelled, her eyelids were partly closed, and she had a good deal of secondary fever. Thomas, æt. 17, had a smart fever at the commencement, which continued two days, and was followed with a scanty eruption that appeared in successive crops;

they maturated on the 5th day, and he returned to his employment of working at the canal on the 7th day. James, æt. 12, had a numerous eruption, which maturated on the 8th day; his face swelled, and he had a slight secondary fever. John, æt. 9, had several pustules scattered over the body, which arrived at the height on the seventh day. William, æt. 14, had very few pustules, and was never confined to bed by the disease; the pustules began to dry up about the 4th day.

For the following account of their first attack of small-pox, I am indebted to their parents, who are sensible, intelligent people. No medical practitioner resided near them at the time, and, being in low circumstances of life, none was sent for, and, of course, they were not seen by any. They took some medicines from the minister of the parish, and all of them recovered. I have no doubt that the account given by the parents is correct; and I am satisfied that they had been affected with small-pox previously to my seeing them; for, on first hearing of the circumstance, I examined their bodies, and observed on different parts of every one of them a great number of pits, which had been left by the disease. On the body of one of them seventy-two pits were counted.

In 1818 they resided in the neighbourhood of Moffat, in Dumfriesshire; and in July of that year, Thomas was exposed to small-pox contagion at Dumfries, and took the disease about a week afterwards. They had then eight children, and five of them, viz. Mary, William, James, John, and Elizabeth, caught the complaint from him. Jane and Margaret escaped, and Ellen has been born since. Elizabeth died nine months ago. Many children in the neighbourhood were afterwards affected with small-pox, which they caught from this family. Mary had a numerous eruption, and was confined to bed between three and four weeks; she had much swelling of her face and salivation; she had a very tedious illness, and recovered with difficulty. William had a great number of pustules, and continued a long time very ill. James had more eruption in the former attack than in the present one; his face swelled, and the eruption continued longer. John had about the same number of pustules in both attacks, but they were longer in acquiring maturity in the first. Thomas had a very severe illness; he had a copious eruption, was confined to bed several weeks, and had a difficult recovery. Elizabeth was the only child that had been vaccinated. The cow-pox were believed to be genuine, and left large scars on her arms. She was ten years old when vaccinated, and thirteen when she had the small-pox. She had a numerous small-pox eruption, and was much pitted afterwards. From the above statement it would appear, that, in all the five cases, the first attack of small-pox was more severe than the second. The parents say the pustules were larger, and continued longer in the first attack; their children were more severely held, and were longer in danger. The eruption, they say, was distinct in all the cases.

Two years ago, the family resided at Springfield, where the small-pox was prevalent. Three children died in an adjoining house, and the two families had frequent intercourse, but none of Bottam's family took the disease.

Ten years ago, Mary, Thomas, William, and James, had chicken-pox in a village in Yorkshire, where the complaint prevailed epidemically at the time. The eruption continued about three days, and left no marks behind it. They were not seen by a medical man, but several cases exactly similar occurred at the same time, and were pronounced chicken-pox by medical men.

Carlisle, 4th March, 1822.

Five Cases of Varioloid Disease. By John Thomas Dennett, *Bognor, Surgeon, &c. to H. R. H. the Duchess of Kent.—Ibid.*

The notes of the disease, as it appeared in Case 1st and 5th, previous to my seeing them, which was on the 19th, were furnished, at my request, by Captain M., the father of the children.

Case I.—Miss Maria M., æt. 6½, complained, on the 16th July, of indisposition, attended with fever, with an appearance of red spots under the skin, partially, about her head, face, neck and person; bowels rather relaxed.—17th. The same symptoms somewhat aggravated; restless at night, pulse high, calling for water in the night, and considerable fever.—18th. Disease assumes a decided character; symptoms increased; much fever, and considerable debility; bowels relaxed; sickness at stomach; no appetite, great thirst, general uneasiness and restlessness, bad night, the spots appearing more elevated and more numerous.—19th, morning. Fever; great indisposition and debility. At 7 *p. m.* she was seen by me; the face, body and limbs, covered with an eruption of small spots, many of which are vesicular, distinct, with inflamed bases; vesicles flat, and somewhat depressed in the centre, others having more the appearance of pustules; no nausea, or pain on pressing the epigastrium; little thirst, tongue white, bowels open, skin hot, but not particularly dry. This I considered as the fourth day of the eruption. *Habeat submuriat. hydrarg. gr. iij. statim, et haust. salin. 4tâ quaque horâ.*—20th. (*5th day of the eruption.*) Restless night, rather delirious, calomel operated well; has been sick; does not complain much of thirst; tongue white, with a brown streak in the centre; vesicles more acuminated, and becoming more like pustules. Continue the draughts, and take a solution of cream of tartar for common drink.—21st. (*6th day.*) Restless night; eruption decidedly pustular; eye-lids swollen, skin cool and moist, bowels open, little thirst.—22d. (*7th day.*) Passed a better night; eruption on the face dying away; pustules on lower extremities very large and full; two or three vesicles have something of the appearance of the true vaccine, depressed in the centre, the circumference quite turgid with fluid, and overlapping the base.—23d. (*8th day.*) Has had a good night; complains of no indisposition; several of the pustules have acquired a dark spot in the centre, but most of them remain full, and their appearance not altered from yesterday; the pustules on the face quite dried up, and covered with a thin brown scab.—24th. (*9th day.*) Pustules on the body drying up, those on the legs acquiring a dark mark in the centre, a mere line of inflammation round their basis.—26th. (*11th day.*) The pustules, except a few on the legs, entirely dried up, and covered with a smooth dark-brown scab; the crusts have fallen off the face, and left a slight discolouration of the skin underneath, and a few pits; makes no complaint.—28th. (*13th day.*) The remainder of the pustules are dried up, and covered with dark-brown crusts.—30th. (*15th day.*) The crusts still remain on.—1st August. (*17th day.*) They remain as on the 30th.—4th. (*20th day.*) Most of the crusts have fallen off, and have left several pits, which are permanent.

Case II.—Miss F. M. æt. 5½.—19th July. An eruption of minute vesicles, rather numerous on the face and neck, very sparingly scattered on other parts of the body; makes no complaint of indisposition.—20th. (*5th day.*) Restless night; vesicles larger, and considerably inflamed round their bases, confluent on the face, collected into clusters on the neck and arms; skin moderately cool. *Habeat submur. hydrarg. gr. iij.*—21st. (*6th day.*) Much the same

as yesterday; the calomel, by mistake, was not given; to be taken this evening.—22d. *(7th day.)* Calomel operated twice; tongue white; not much fever; eruption mostly pustular; a considerable number collected in clusters round the ancles, and on the instep.—23d. *(8th day.)* Rather restless and fretful; the eruption much as yesterday.—24th. *(9th day.)* The eruption on the face drying up; no alteration in the appearance of the eruption on the other parts.—26th. *(11th day.)* Most of the pustules dried up, and covered with a smooth brown scab.—28th. *(13th day.)* Pustules all dried up, and covered with dark brown crusts; some on the face and neck fallen off. —30th. *(15th day.)* The crusts remain on.—1st August. *(17th day.)* The same.—4th. *(20th day.)* Most of the crusts have come off.

Case III.—M. M. æt. 4½.—22d July. *(2d day.)* A few vesicular apots on the face, scalp, and neck; little or no fever.—23d. *(3d day.)* More of the eruption has appeared on the body and limbs; the vesicles are acuminated; makes no complaint; bowels rather lax.—24th. *(4th day.)* No increase of the eruption since yesterday; the apices of the vesicles are covered with an amber-coloured crust, from exudation of the contained fluid.—26th. *(6th day.)* The vesicles are dried up, and covered with dark brown crusts.—28th. *(8th day.)* Some of the crusts have fallen off.

(To be concluded in our next.)

Poisoning by Oxalic Acid.

(Continued from page 345.)

The two following experiments show the comparative effects of the diluted and the concentrated acid.

Experiment 3.—Six ounces of a solution, containing 33 grains, were injected into the stomach of a dog about 8 or 10 pounds in weight.

2′. A strong effort to vomit, repeated at 8′ 30″, and again at

12′. He now spreads the legs in a peculiar manner, and hangs the head; respiration hurried; hindlegs stiff.

18′. The efforts to vomit, which have been increasing in frequency and violence, are now preceded by hurried breathing, at first short, afterwards very deep and convulsive.

25′. The efforts to vomit are not nearly so strong; he spreads his legs, hangs the head, and looks very dull, but is sensible; the hindlegs are permanently rigid, and, in consequence, he assumes very odd and peculiar postures, both in standing and in walking.

29′. The breathing becomes suddenly more and more hurried, shorter and shorter, and at last completely suspended; immediately a violent attack of general opisthotonos succeeded, during which he discharged some fluid, fetid fæces, not reddening litmus; the whole body then became gradually relaxed; and at

30′. He made one convulsive gasp only: the heart fluttered faintly for half a minute or a minute afterwards. The body was examined immediately; the heart was found contracting slightly, and could be made to contract as long as the examination lasted. The blood was fluid, and in the arteries dark, [we forgot to notice whether it coagulated.] The stomach and intestines were natural externally. The stomach contained scarcely an ounce of transparent fluid, and some feculent-like matter. Its internal coat was somewhat coagulated, of a light ash-grey colour, perfectly strong and entire, and without the slightest vascularity. The intestines contained some fluid, which reddened litmus as low down as the cœcum. The blood in the veins of the stomach, and upper portion of the mesentery, was not charred, but quite fluid, and coagulated naturally after it was withdrawn.

Experiment 4.—Thirty-three grs. dissolved in two parts of tepid water were injected into the stomach of a dog about eight pounds in weight.

7′. The efforts to vomit have commenced.

30′. For some time they were frequently repeated, but they are now more rare and less violent. The breathing is full and somewhat hurried. He looks dull, and always remains in the same place and posture.

1h. The efforts to vomit are now very slight. The breathing is shorter and quicker. He is very dull and stupid in appearance, yet quite sensible. The hindlegs are feeble. He preserves his posture most obstinately.

1h. 15′. The efforts to vomit have almost ceased. The breathing is still quicker and shorter. The hindlegs are not affected.

1h. 20′. The efforts to vomit have ceased. The respiration is irregular in fulness and frequency. The sensation of the hindlegs is much impaired; but the rest of the body continues quite sensible. He walks about easily, but not unless forced.

1h. 25′. He now staggers when he tries to walk.

1h. 30′. The breathing is short, and 34 in a minute; and is increased at intervals both in frequency and fulness. He lies constantly on the side, is very dull, and the sensation of the whole body is somewhat impaired.

1h. 45′. Respiration 120, fuller and more regular. The insensibility increases. He still lies constantly on the side, with the whole body relaxed; but when stirred, he rises and staggers about like a drunken person. The hindlegs are very weak, but not rigid.

1h. 50′. Little change. The eyes are less sensible.

2h. 30′. The breathing is considerably slower. The eyes are scarcely sensible when the hand is waved before them, and he does not stir when struck; yet, if previously roused by shaking, he staggers about a little, and continues for a few seconds somewhat sensible.

4h. The breathing is short, soft, and 11 in the minute. The insensibility has become complete, and the whole body quite flaccid.

7h. He was found dead, and so flaccid and warm that he probably had died only about an hour before.

The body was examined nineteen hours afterwards. The stomach was externally healthy. It contained a large quantity of thick, coffee-coloured fluid, and its inner surface was lined with much mucus. The villous coat was everywhere chequered with angular prominent specks of a bright scarlet colour, in some places very intense, confined here and there to the epidermis, but generally extending likewise to the corion. For a considerable space around the cardia, the villous coat could be easily scraped off, but its porous structure was entire. Near the pylorus it was perfectly strong. The posterior surface of the membrane was interspersed with lines of black granular extravasation, prominent, and not extending deeper than the villous coat.

The two next experiments show what influence the division of the pneumo-gastric and sympathetic nerves has on the action of the diluted acid.

Experiment 5.—A drachm of oxalic acid, dissolved in eleven parts of tepid water, was injected into the stomach of a strong rabbit.

8′. 30″. The head began to be drawn back, and remained permanently so. The breathing soon became hurried, and the animal seemed very uneasy.

10′. Convulsions excited by touching him. Soon afterwards he was seized with most violent and frequent opisthotonos, by which the whole body was raised into the air, sometimes to the height of two feet. The breathing was suspended during each paroxysm of opisthotonos and for a few seconds afterwards; and during the interval it was laborious.

12.′ Insensibility has been coming

on gradually, and is now complete. The convulsions have ceased. The breathing is very small, and becomes rapidly slower and less distinct. The heart cannot be felt.

13′. The breathing has ceased. The body was then examined without delay. Three minutes after death, the heart was found neither contracting nor contractile; and its blood was florid in the aortal, dark in the pulmonary cavities. The stomach was removed and washed a minute and a half after death. It contained a considerable quantity of half-digested herbs; and a thin layer of white, dense, stringy matter adhered firmly to its inner surface. The epidermis had everywhere a yellowish brown colour, was somewhat brittle and less adherent, but its porous structure unaltered. The duodenum was healthy, and its inner surface covered with a very thick layer of a dense, white, firmly adhering matter.

Experiment 6.—The same quantity of acid was injected, under the same circumstances, into a rabbit about the same size and age; but the pneumogastric and sympathetic nerves were divided fifteen minutes before.

10′. The head began to be drawn back upon the neck, and he shook it several times. The breathing became gradually, but rapidly, very quick and full, and, finally, was at intervals completely suspended. Several violent paroxysms of opisthotonos immediately succeeded. Then the animal became rapidly insensible, the convulsive paroxysms ceased, the whole body was relaxed, the breathing very small and short, at last imperceptible, and the pulsations of the heart could not be felt. A few convulsive inspirations ensued till the 14th minute, when death was complete.

The body was examined immediately. The heart was not contractile. The blood was fluid, dark in the pulmonary cavities, and florid in the aortal, and coagulated slowly. The lungs were perfectly natural. The stomach was cut open, and washed two minutes after death. Externally it was quite healthy. It contained a quantity of half-digested herbs, and was lined with a thick layer of dense white-coloured matter. Three-fourths of its internal surface had a light yellowish-brown colour; and the villous coat where it was so tinged was more easily scraped off than elsewhere. There was on no part of it any unusual vascularity.—*Paris' and Faublanque's Med. Jur.*

(*To be continued.*)

Of the Preservation of Public Health.

It is not altogether easy to assign any sufficient reason for the striking neglect of this part of our internal policy, particularly when compared with the anxious and minute precautions employed in other countries. Much must doubtless be attributed to the spirit of our government, repugnant as it is to every thing which bears the appearance of intruding on the rights of individuals; and something, though we believe less than the authors suppose, to the spirit of independence and private exertion which secures the advantages without the inconveniences of legislative interference. The lamentable condition of Ireland during the last few years has clearly shewn the want of a system of medical police, and the defect has been remedied by a late Act, which enacts that officers of health shall be annually appointed by the inhabitants in every city and large town. We perfectly coincide with the authors in thinking that some measure of this kind might be advantageously extended to the rest of the kingdom, and that a prospective enactment would be more politic, than to be obliged to legislate for the evil when its mischiefs had been accomplished. At the present time it is an indictable offence for any person to pass through the streets, or cause others to pass through the streets even for medical advice, while they

have the small-pox upon them. The authors express their surprise that no public measures have been taken to check the propagation of venereal diseases, and very justly consider that such an attempt could not be supposed to afford encouragement to immorality; they incidently suggest that the attachment of a surgeon to every police office would be materially useful, and not very expensive.

Attention to cleanliness in cities, and to the purity of the waters by which they are supplied, has undoubtedly a great influence on public health, and forms a very important branch of medical police. Here indeed we may boast a vast superiority over every other nation in the extent and execution of the drains in all our towns, and in the ample manner in which they are generally supplied with pure water. There are two other points, however, which loudly call for reformation or regulation; we mean the practices of slaughtering cattle, and burying the dead in the very centre of our most populous towns. As to the former, independently of its obnoxiousness to the senses, it has a direct tendency to contaminate the air we breathe with putrid miasmata, and renders the passage through our streets not only disagreeable but dangerous. As to the latter, though less noticed, there can be no doubt it must be highly injurious from the continued accumulation of putrescent matter at a small distance only beneath the surface of the earth; the authors state that "it is notorious that there are many church-yards in which the soil has been raised several feet above the level of the adjoining street by the accumulated remains of mortality; and there are others in which the ground is actually probed with a borer before a grave is opened. The Commissioners for improvements in Westminster, reported to Parliament in 1814, that St. Margaret's church-yard could not consistently with the health of the neighbourhood be used much longer as a burial ground, for that it was with the greatest difficulty a vacant place could at any time be found for strangers; that the family graves generally would not admit of more than one interment, and that many of them were then too full for the reception of any member of the family to which they belonged."

To this head belong the arrangement and cleansing of privies. It is well known that the emanations from them produce a species of asphyxia, to which the French workmen have given the name of *plomb*. According to M. Dupuytren, death sometimes takes place in a very short period; at others, the symptoms are less intense, and if the patients be carried into the open air they gradually recover. An emetic appears to be the remedy on which the nightmen rely for relief. These noxious effects are generally produced by sulphuretted hydrogen, sometimes combined with ammonia; though much less frequent than in France, these accidents occasionally happen in our own country.

We think it of importance to introduce here some abstracts from a Paris document of considerable interest, entitled "Rapport général sur les Travaux du Comité de Salubrité Publique," an account of which was published in the Medical Intelligencer for January.

"The duties of this council were the examination of the markets, of the rivers, of the cemeteries, of the slaughter-houses, of the streets, of the anatomical theatres, all sinks and drains, the public baths, every thing relating to medical statistics and to the bills of mortality; the means to be taken for increasing the health of public places, and for improving the lighting of the town. They were also intrusted with the care of putting down irregular practitioners of medicine, and of repressing all trades and avocations which could by any means compromise the public health.

"In spite of the extent and variety of business, which has every year been submitted to the council of salubrity, the reports which we have had the honour of addressing to you, and your predecessor, Count Angles, are only 301 in number. This number exceeds the number of the former year by 19, a difference so small, that it would be idle to search for the reason of it. Even this difference, however, is favourable. It proves that the industrious arts have not fallen off in activity, and if the labours of the council were more considerable, during the preceding years, the reason was, that new arts, till then unknown, had arisen amongst us, which presented questions of salubrity till then not thought of. Your committee has formed for itself, and its successors, a code of regulations on these arts, which, now better understood and better practised, either obviates or lessons all the difficulties.

"Of the 301 reports of 1821, fifty-five were concerning dairies about to be established, to be improved, or to be displaced. Twenty-four were concerning the distilleries for the extraction and rectifications of spirits from wine and potatoes, and for the making of other liquors. Six on the establishment of manufactories of syrup of potatoe starch. Six on sugar houses. Five on the carbonization of peat and wood. Two on the purification of coal. Two on the extraction and purification of hydrogen gas. Three on the purification of oil. One on the making of printer's ink. Thirteen on manufactories of candles, to be established, improved, or removed. Two on pig-styes. Two on a plan for insuring the life of horses. One on a plan for insuring against the danger of epidemics in cattle. One on mad dogs. The remainder were on the various arts of the starch maker, the brewer, the catgut maker, the washerwoman, the hat maker, and the carrier. The boiling of blood, of sheep's heads, and of tripe, has engaged the attention of the committee. To these may be added the manufactories of glue, of paste-board, paper, colours, white iron, japanned oil-cloths, printed cloths, of sulphate of copper, of soda, of iodine, cerusse, Prussian blue, potass, fulminating mercury, dye-stuffs, the purification of gold and silver, morocco, tanning, varnishing of leather, soap, and the establishment of steam-engines.

Besides all these things, the attention of the committee has been occupied with the different articles of the toilet and of cosmetics, dentrifice powders, aromatic waters, opiates, pommades, and compositions for blackening the hair.

The time and care of the committee have also been much engaged with the different quack medicines and secret remedies, as the vegetable epispastic taffetas, the universal antiseptic, Rowaix's remedy, Leroy's remedy, the essence of chalais, the marvellous essence, &c. The continued sale of these medicines shews the indefatigable obstinacy of their proprietors, and demonstrates the imperfections and weakness of the laws, in repressing their daring criminality. This weakness is every where felt. It excites the activity of the quack; it diminishes the zeal of the good practitioner; and the resulting discouragement and apathy which seizes the useful and worthy members of society, form one of the most dangerous sources of mischief to the country."

(To be continued.)

MELANGE.

Frauds and imperfections in Paper Making.—In order to increase the weight of printing papers, some manufacturers are in the habit of mixing sulphate of lime or gypsum with the rags to a great extent. I have been informed by authority, upon which I place great reliance, that some paper contains more than one-fourth of its

weight of gypsum; and I lately examined a sample which had the appearance of a good paper that contained about 12 per cent.

The mode of detecting this fraud is extremely simple: burn 100 grains, or any given weight of the paper in a platina, or earthen crucible, and continue the heat until the residnum becomes white, which it will readily do if the paper is mixed with gypsum. It is certainly true that all paper contains a small quantity of incombustible matter derived from accidental impurities, but it does uot amount to more than about one per cent.; the weight then will indicate the extent of the fraud.

With respect to the imperfection of paper, I allude to the slovenly mode in which the bleaching by means of chlorine or oxymuriatic acid is effected. This, after its operation, is frequently left in such quantity in the paper that it may be readily detected by the smell. Sometime since, a button-maker in Birmingham, who had manufactured the buttons in the usual way, was surprised to find that after being a short time kept, they were so tarnished as to be unsaleable; on searching for the cause, he found that it was derived from the action of the chlorine which had been left in the paper to such an extent as to act upon the metallic buttons.—*Edit.*

Boiling Spring of Milo.—The 14th volume of the *Annals*, p. 27, contains an analysis of the water of the boiling springs of Milo; but this island is there incorrectly called Milto. For this correction I am indebted to the Rev. Mr. Holme, of Cambridge, by whom the water was supplied for analysis.—*Edit.*

Dr. Uttini on the Vessels of the Umbilical Cord.—To set the question at rest, whether the placenta and umbilical cord contain lymphatics, as well as arteries and veins, Drs. Uttini and Vegna del Ferro, minutely examined a great number of placentæ. They were injected with coloured waters, and none of it entered either from the arteries or veins. The amnion was found to be separable from the chorion as far as the insertion of the funiculus, and retrograding towards the vaulted surface of the placenta, to form another thin membrane, lining its interior surface, which appeared under the microscope, covered with long shaggy filaments, some of them semi-transparent. In a transverse section of the umbilical cord were also seen, between the umbilical artery and the vein, a round cavity, studded with transparent points, resembling the mouths of vessels, and a viscid substance oozing from them. When mercury was thrown in between the membranes, and slightly pressed with the finger, it entered the funiculus, and when this was divided, it escaped from the transparent points, as from the mouths of transparent vessels. These Dr. Uttini thinks are, therefore, lymphatics, and the shaggy filaments their commencement. These he thinks, join at the beginning of the funiculus; and where the funiculus ceases the lymphatics enter the peritoneum, retaining their functions. —*(Magazin der Auslandichem Literatur.*

Mr. Clayton's Comparative Anatomy of Singing Birds.—Mr. Clayton and Dr. Moulin discovered that in birds, contrary to what takes place in man and in quadrupeds, there is almost a direct passage from one ear to the other, so that, if the tympanum of both ears of a bird be pierced, water, when poured in, will pass from the one to the other. There is no cochlea, but a small passage, which opens into a cavity formed by two plates of bone, that constitute a double skull all round the head. The outer plate of bone is supported by many hundreds of small thread-like columns, or rather fibres. Now this cochleous passage was observed to be much larger in singing-birds than in others that did not sing; so very remarkably so, that any person who

has been once shown this, may easily judge by the head what bird is a singing-bird, though he were ignonorant of the bird or its habits. Might not this curious fact be useful in ascertaining whether the antediluvian birds, whose bones are found imbedded in the Paris basin and elsewhere, were birds of song, and hymned the infant world with their music. Mr. Clayton says that the only quadruped whose ear resembles that of birds, is the mole, which is well known to be quick of hearing.—*(Clayton's Letters from Virginia.)*

Tiedemann's Case of Double Uterus and Vagina.—In the very excellent Museum of Heidelberg, of which we have given some account in our first series, is a singular preparation of the uterus and vagina, both of which are double, and the uterus enlarged, from having been impregnated. Dr. Tiedemann tells us, that the patient died nineteen days after delivery, and the left uterus is accordingly in the usual state, which was to be expected, after such a circumstance. The uterus, on the right side, is characterized by the appearances which are found in those who have never borne children. The author of the paper tells us that he has seen no less than two cases of a similar kind. —*(Saltzburger Zeitung.)*

A Report (the 1st) of the Northumberland, Durham, and Newcastle Infirmary, for Diseases of the Eye, for the Year ending March 22, 1823.

DISEASE.	Cured.	Reliev.	Incurab.	Irreg.	Remain.	Admit.
Acute Inflammation of the Coats of the Eye	136	3	—	5	20	164
Chronic, Ditto	161	13	—	7	37	218
Ulcers of the Cornea	46	2	—	1	8	57
Albugo, Leucoma, Nebula, and Pterygium	61	50	11	5	54	181
Staphyloma	2	6	1	2	2	13
Purulent Ophthalmia in Children.....	32	—	—	3	6	41
Ditto in Adults.....	23	1	—	—	5	29
Foreign Bodies embedded in the Cornea.....	9	1	—	—	—	10
Cataracts	19	8	—	8	25	0
Ditto complicated with Amaurosis	—	7	9	2	3	21
Ditto complicated with closed Pupil	—	2	1	—	11	14
Ditto complicated with Opacity of the Cornea..	—	2	4	1	1	8
Amaurosis perfect	—	3	1	3	2	9
Ditto partial.....	29	10	—	7	13	59
Diseases of the Lachrymal Sac	14	—	—	1	8	23
Scrophulous Ulceration of the Tarsi	46	1	—	7	30	84
Simple Ditto.....	35	—	—	—	3	38
Eversion of the Eyelids ..	9	1	—	1	5	16
Inversion of the Eyelids ..	6	—	—	—	2	8
Encysted Tumours of the Eyelids	10	—	—	—	—	10
Dropsy of the Eye	—	2	—	—	—	2
Total.....	638	112	27	53	235	1065

Of the cases marked irregular, one died from accidental injury of the Spine; and it is probable that many have been either cured or relieved who have omitted to return thanks at the Institution.

Consulting Physician, Dr. Headlem. *Surgeons*, Mr. T. M. Greenhow and Mr John Fife.

Price Current of East India Drugs, for June, 1823.

	£	s.	d.		£	s.	d.
Aloes Hepatica, the cwt.	12	0	0	to	25	0	0
Anniseed, Star	4	0	0	—	4	10	0
Borax, refined	3	0	0				
——, unrefined or Tincal	2	10	0	—	2	15	0
Camphire, unrefined	12	0	0	—	13	0	0
Cardamoms, Malabar, the lb.	0	3	0	—	0	3	6
——, Ceylon	0	0	9	—	0	1	3
Cassia Buds, the cwt.	17	0	0	—	17	10	0
—— Lignea	8	10	0	—	10	0	0
Castor Oil, the lb.	0	1	0	—	0	2	0
China Root, the cwt.	1	15	0	—	2	0	0
Cochineal, the lb.	0	3	6	—	0	4	6
Coculus Indicus	3	0	0	—	3	5	0
Dragon's Blood	10	0	0	—	32	0	0
Gum Ammoniac, Lump	5	0	0	—	9	0	0
—— Arabic	5	0	0	—	6	0	0
—— Assafœtida	3	0	0	—	8	0	0
—— Benjamin	10	0	0	—	35	0	0
—— Animi	3	0	0	—	10	0	0
—— Gambogium	14	10	0	—	15	0	0
—— Myrrh	6	0	0	—	18	0	0
—— Olibanum	2	0	0	—	4	0	0
Lac Lake, the lb.	0	0	9	—	0	2	6
—— Dye	0	3	0	—	0	5	6
—— Shell, Black	2	0	0	—	3	0	0
—— Shivered	2	5	0	—	5	0	0
—— Stick	0	15	0	—	1	10	0
Musk, China, the oz.	0	10	0	—	1	0	0
Nux Vomica, the cwt.	1	5	0	—	1	8	0
Oil Cassia, the oz.	0	0	8	—	0	0	9
—— Cinnamon	0	12	0	—	0	15	0
—— Cloves	2	5	0	—	2	10	0
—— Mace							
—— Nutmegs	0	2	0	—	0	2	6
Opium, the lb.							
Rhubarb	0	1	6	—	0	5	0
Sal Ammoniac, the cwt.	4	10	0	—	5	0	0
Senna, the lb.	0	0	6	—	0	2	6
Turmerick, Bengal, the cwt.	1	10	0	—	1	12	0
——, Java	1	15	0	—	2	0	0
——, China	2	5	0	—	3	0	0
Zedoary							
Galls, in sorts	6	0	0	—	6	10	0
——, Blue	7	10	0	—	8	0	0
Indigo, Blue, the lb.	0	10	2	—	0	10	7
——, Purple and Violet	0	9	6	—	0	10	0
——, Good ditto	0	8	9	—	0	9	3
——, Fine Violet and Copper	0	8	3	—	0	8	6
——, Good ditto	0	7	6	—	0	8	0
——, Ordinary ditto	0	2	9	—	0	6	3
——, Consuming qualities	0	6	6	—	0	7	9
——, Madras, fine and good	0	8	3	—	0	9	2
Safflower, the cwt.	6	0	0	—	12	0	0
Sago	0	18	0	—	1	12	0
Saltpetre, refined, the cwt.	1	8	0	—	1	9	6
Spices, Cinnamon, the lb.	0	4	7	—	0	6	10
——, Cloves	0	2	2	—	0	3	9
——, Mace	0	5	2	—	0	5	3
——, Nutmegs	0	2	6	—	0	3	6
——, Ginger, the cwt.	1	3	0	—	1	4	0
——, Pepper, black, the lb.	0	0	6	—	0	0	7
——, White, ditto	0	1	3				
Wood, Saunders Red, per ton	10	0	0	—	10	10	0

Professor Meyer on the Transition of Liquids from the Mother to the Fœtus.—From experiments on pregnant rabbits, Professor Meyer concludes, 1st. That stillicidous fluids, infused into the mother, may be transferred to the fœtus, though he does not deem the point to be quite settled, more comparative experiments being wanted to establish it: 2nd. That the transposition takes place by the deposition of the fluid in the cavity of the amnion; 3d. That the lungs and trachea of the fœtus exhibit no traces of the injected fluid, which proves that the fœtus does not, as Scheel and others maintain, draw the liquor amnii into the lungs. M. Meyer never thought this opinion sound, and explains the appearance of amnial liquor in the trachea of a fœtus, by observing that the fœtus sometimes makes respiratory movements while enclosed in the membranes of the ovum, which may also take place with the mature fœtus in utero, if the circulation be any way interrupted. This, however, is not natural, and may prove fatal to the fœtus.—*(Hamburger Archiv. für Medicin.)*

HOSPITAL REPORTS.

Guy's Hospital.

July 5th. (By Sir A. Cooper.) Case of carcinoma penis, or rather carcinoma preputii. The preputium was removed—of a watery, schirrous, uneven consistence.

Lithotomy. Patient, aged 68 — after sounding the bladder, pronounced to be too irritable to admit of the operation.

—— —— Stone extracted from a child, about five years of age.

July 10. A child was brought into this hospital, on Thursday last, between twelve and one, dreadfully wounded from the wheels of a waggon having passed over her arms It was found immediately necessary to amputate. Mr. Key removed the socket of one arm from the shoulder bone; the other was also dreadfully lacerated: hopes, however, are entertained of saving it.

St. Thomas's.

July 11.—Mr. Travers, it was reported, was to have performed the Tallicotian operation—it did not however take place—but on Friday next, in all probability, it may be attempted.

OBITUARY.

Lately, Mungo Park, M. D. son of the celebrated and unfortunate traveller of that name, in the East Indies.

TO CORRESPONDENTS.

P. P. of Liverpool, has been already answered.

"The History of CHARLATANISM" *will be inserted, but, we must, in consequence of the discretion vested in us, considerably curtail it—as well as afterwards divide it into two—and then the parts, although, according to Euclid, not equal to the whole—will be found sufficiently important, and equally mathematically correct for our purpose.*

*We entreat "*BOREALIS" *to keep his temper—a promise delayed in the execution, by no means cancels the intention to fulfil it: he may, nevertheless, if he thinks fit, in the meantime,* BLOW US UP *as much as he likes; but* ÆOLUS *himself and his boisterous crew can never* BLOW US DOWN *by fair means—any other we never apprehend.*

*"*BOBADIL" *was received last week, but he ought to know, as well as ourselves, that* BIFRONS *is* hors de combat; *moreover, that he has twice already performed* GENUFLEXION *to save him from quarantine, thereby obtaining only a conditional pardon. The whining apostato-Empiric if he was not exactly so before, is now so far sunk beneath the surface of the scum, as to be completely removed out of the axis of vision. We recommend him nevertheless to get his* MARROW-BONES *well padded for frequent repetitions of the same ceremony—his joints, every one is aware, are well* synovialized, *and are never backward in catering to the* FLEXIBILITY *of their* TOTTERING *master.*

W. W.'s letter is received—we shall be glad to see him when he comes to town.

R. R. and G. L. require no reply.

London:

Printed by E. JUSTINS, 41, *Brick Lane, Spitalfields.*

Published by COX and SON, St. Thomas's Street, and 39, High Street, Southwark. Sold also by Sherwood, Neely, and Jones, Paternoster Row; Simpkin and Marshall, Stationers' Court; John Cox, Berner's Street, Oxford Street; W. Stewart, South Bridge Street, Edinburgh; Hodges and M'Arthur, Dublin; &c. &c.

THE WEEKLY

MEDICO-CHIRURGICAL & PHILOSOPHICAL MAGAZINE.

No. XXIV.] SATURDAY, JULY 19, 1823. [*Price* 4*d*.

" FLORIFERIS, UT APES, IN SALTIBUS OMNIA LIBANT
OMNIA NOS, ITIDEM, DEPASCIMUR AUREA DICTA."

DR. GALL.

(Continued from page 357.)

Of Intermittent Alienations, during the paroxysms of which certain faculties or propensities are manifested with great energy.

Some alienated persons whose malady is intermittent, manifest, during their paroxysms, a particular energy of certain moral or intellectual faculties. This is what is proved by the following examples. M. Pinel speaks of a madman who, at all other times, and during his long intervals of quietude, was but a very vulgar individual; but who, during his paroxysms, discoursed upon the events of the revolution with all the force, dignity, and purity of language that could have been expected from the most learned man of the soundest judgment. The same author relates, from Perfect, that a young person of a very delicate constitution, and subject to nervous affections, became alienated, and that, during her delirium, she expressed herself with facility in very harmonious English verses, although she had not previously evinced the least taste or disposition for poetry. Van Swieten relates that a woman, during her paroxysms of mania, gave tokens of a rare facility for versification, although up to that time she had only been accustomed to manual labour, nor had her understanding ever been matured by cultivation.

In these cases, it only becomes a question of the more energetic manifestations of certain faculties for indifferent things; but other examples shew that people labouring under mental alienation may also experience a great degree of irritation with respect to their evil qualities. M. Pinel has frequently observed that men who were very sober during the intervals of calm of a periodical mania, gave themselves up with an irresistible propensity to drunkenness on the return of their paroxysms; that others, under the same circumstances, could not keep from stealing and pilfering, whilst, in their lucid moments, they were instanced as models of probity; that mild and benevolent characters, in consequence of alienation, became turbulent, quarrelsome, and often entirely unsociable. He mentions one man afflicted with a very inveterate periodical. His paroxysms generally lasted eight or ten days every month, and presented the most striking contrast between this condition and the natural state of the individual. During his lucid intervals his physiognomy is calm, his air mild and reserved, his answers are timid and replete with accuracy; he shews urbanity in his manners, strict probity, the desire even of obliging others, and expresses ardent wishes to become cured of his malady; but upon the return of the paroxysm, which is particularly characterised by a certain redness of the face, by a throbbing heat of the head, and great thirst, his gait is hurried, the tone of his voice is masculine and arrogant, bold look, and he feels the strongest propensity to provoke those who approach him to fight, and to excite them to deadly quarrel. Another madman, says M. Pinel, of a mild and pacific disposition, appears, during his paroxysm, to be inspired by the devil and his malice. His evil activity experienced no repose—he shut his companions up in boxes, provoked, beat them, and on all occasions excited them to quarrel.

(To be continued.)

An Essay on the Baneful Influence of so frequently Washing Decks in His Majesty's Ships on the health of British Seamen; with Observations on the prevention of Dry Rot in the Royal Navy, by ROBERT FINLAYSON, M.D. *Member of the Royal College of Surgeons of London, and Surgeon in the Royal Navy.*—(*p. p.* 85.)

Struck with the title-page of this book, and perceiving that it came from no less a personage than an M. D. and a surgeon in the navy, we were induced to overhaul its pages to learn whether the talents and experience of the author were in any shape commensurate with the apparent importance of the task he had imposed upon himself. To say that we were disappointed in our expectations, would convey but a faint idea indeed of what we feel. For whose use the book is intended, or what inducement the author had to commit himself so egregiously by sending into the world such a farrago of crude indigested stuff, he alone may know —and perhaps himself alone, as a matter of some moment, does it regard.

But coming, as it ostensibly does, from a naval surgeon, we were naturally inclined to look for observations, not on the dry rot of ships, a subject that very recently has occupied the attention of more competent investigators, in order to its prevention; nor whether a seaman's grog be too strong, or ought to be diminished in quantity and sweetened with sugar, but on the pathology of some of the more inveterate diseases to which our brave tars are liable either in foreign or home stations—in hot or in cold climates—clothing, dietary remarks, &c.—Instead of these we are served up, in the first place, with what the author is pleased to stile PROEMIAL observations; in which he does not forget to bestow a quantum sufficit of *blarney* upon the late Lord Melville, by way of a passport, no doubt, to his present lordship of that name, to whom, by the bye, the book is dedicated. Nor does the author proceed much farther before he lavishes, for divers reasons and sundry causes thereunto moving him, not a little of his savoury incense, in two different places, upon the well known Editor of the MEDICO-CHIRURGICAL REVIEW; doubtless, by way of conciliating his indignation at this pitiful abortion of his intellectual faculties. Dr. Weir, one of the present medical commissioners, comes in also for his whack of adulation—the remainder of the PROEMIUM consists entirely of what has been known, whistled and sung, from the captain to the cabin boy, for the last five and thirty years.

As specimens of the exalted imagination of the author, and the poetic flights, in which he indulges his airy fancy, let us present the following, in allusion to seamen.

"Can we neglect a body of men whose energy increases with the RAVING of the storm? never shall we abandon the brave tar who mounts with alacrity on the *quivering* shroud, when "o'er his head the rolling billows sweep."

"Besides, our gallant 'sons of the waves' have not been less celebrated in human than '*elemental* war;' for, when the united powers of Europe were in league against us, British seamen most undauntedly stood forward to *wield* our naval thunderbolts, and *hurl* destruction on our *most malignant* enemies—then the British flag triumphant *waved her red lion o'er all watery space!!!!!*"

Whether the following couplet was intended for the Editor of the Review, or Dr. Weir, as it stands between the encomia bestowed on each, is difficult to say.

"A wise physician, skilled our wounds to heal,
"Is more than armies to the public weal."

Who the author of the hyperbole is, is not mentioned. Of the former, however, he says, that "his essay on the influence of tropical climates, more especially the climate of India, on European's constitutions," &c. "*Stands like a beacon* for the direction of the medical officer on the ORIENTAL SERVICE, while his other works are equally important to the home practitioner." That is, we presume, in his own style, to the OCCIDENTAL SERVICE.

We hope the Editor of the Review will give Mr. Robert Finlayson, a lift in his next quarterly publication; in short, we don't see how he can well get off from doing so, after the handsome compliment paid to him by his anti-deck-washing eulogist.

Before we proceed TO WASH THE DECKS, we shall take up another couplet quoted by our author in praise of British seamen, not because it is the most happy, but from our willingness to do justice to the refined taste of the author himself, which we confess we should less reluctantly have subscribed to on any other subject than the present.

" Alike to him each climate and each blast,
" The first in danger, in retreat the last."

Doctor Finlayson commences his anti-deck washing strictures, after having, doubtless to shew his classic reading, quoted the following piece of rather anomalous latin, " Ex aqua oritur ær, ex ære morbus," with *descanting* on the bad effects of humidity, heat and cold. Neither, we are sorry to add, does he here betray any more enlightened views of his subject.

" Besides, says he, *moisture* when applied to the *lungs* and *capillaries* on the surface of the body, always produces cold, owing to the large quantity of heat it requires to convert water into vapour; and, in this way, the size of the blood-vessels, on these extensive surfaces *become* lessened whereby the balance of the circulation is *destroyed*.

In what manner this moisture is applied to the lungs and capillaries of seamen in the action of washing the decks, any more than when they are exposed to heavy rain, sprays of the sea dashing over them when attending to the " calls of duty, or the pipe's long trill," or in the simple act of ablution for the sake of cleanliness, the author of the " baneful effects," has not shewn either by precedent or example.

" Indeed, continues he, it is by the *injudicious* application of *water*, that three fourths of all the diseases in the navy are induced.

" It excites inflammations of every *species* and *degree*, from *the simple catarrh* to the *severest pneumonia*, and generates complaints of every kind, from the mildest functional derangement, to the most hopeless organic disease."

Here again we have to regret, that this anti-disciple of Sangrado has not instanced some forcible cases, how, when, and where water was productive of the " baneful influence," to which he alludes. We know that cats have the greatest aversion to wetting their feet—perhaps the antipathy is congenial in some measure, though not generally, with other animals; but that British seamen should ever be taught the hydrophobic absurdity of detesting the very element on which they live, to the rude visitations of which they are continually, as a consequence of their calling, exposed, is perhaps one of the most unequivocal manifestations of ambiguous intellect that has been read or heard of, from the mouth of a navy surgeon at least, since the days of Noah. And that the only application to washing of the decks, should be the means whereby the use of water becomes so prejudicial to the health of seamen, is no less futile and untenable. Are not sailors at all times and seasons exposed to colds and heats—moisture and aridity? Is it not these very exposures that render them worthy of the appellation of " hardy tars," that qualify them at all hours for the exercise of their duty? so far from wishing the laudable and healthy practice of deck-washing abolished or even disadvantageously modified, and the dry holystone or any thing else substituted, we heartily concur, in its continuance, to which indubitably the health of our brave seamen have been more benefited than either the skill of the surgeon, or the contents of the medicine chest could ever have effected without it. As well might Mr. Finlayson say, that a sailor ought not to wash his

face with water, but to rub it with a dry towel or a piece of coarse canvass. There is as much reason in the one as in the other method—and the result in either case equally analogous. —In fact, such are the vagaries and uncultivated notions contained in this "ESSAY," that we have our doubts, and considerable doubts indeed, whether ever Dr. Finlayson, with whom we have not the honour to be either directly or indirectly acquainted, had a hand in any of the puerile theories it introduces, much less in the affected and coarse composition that attempts to elucidate them—in fine, we should much sooner place it to the account of some illiterate admiralty clerk, than to that of an M.D. and a surgeon in the navy, were we not authorized to place it to the latter, who, if he has seen any thing must have had opportunities of witnessing the reverse of his opinions practicably promulgated with invariable salubrity and good effect over the health and condition of every one on board, which, without plentiful ablution could never have been attained.

To come to the point, we never read a worse or more unnautical description of the process of deck-washing than is given in this book, nor a poorer argument against, what, in the language of the flowery though indiscriminate author, he calls the advocates of *diurnal irrigation.*

"Thus, says the author, under the *oscillation* of public opinion, I am aware of the great difficulty there will be in attempting to effect any change on a system that has been long established."

Indeed we apprehend, that more forcible arguments will be requisite than any yet adduced by Mr. Robert Finlayson, before the "system" of deck-washing, the source of health and cleanliness, be abolished in the navy; and there are few who have been lately connected with the service that are not aware that this operation is considerably restricted than it formerly used to be, particularly in the navy and East India company's ships, to need any further amendation.

The decks are generally washed by the morning watch—a time above all the most fit for the purpose, when the body and members have been stiffened, and the animal fluids condensed by the night air, which, during the exercise necessarily attendant on washing the decks, are relaxed and expanded by being brought, in this manner, into a more healthy action.

The author of the "baneful influence" observes—

"Immediately the watch comes on deck, water is pumped from the main deck, and drawn from the head, and thrown on the main and quarter decks in the utmost profusion; and this is followed (or sometimes preceded) by buckets of sand being strewed on the decks, and the seamen, during the whole of this period, are compelled to work without their shoes and stockings, (although the thermometer may range at or below the freezing point) dragging the *large holy stones*,* working the *hand holy stones*, pumping and carrying water, and ultimately using brooms and swabs to dry the decks before going down to breakfast."

To the first assertion here of the watch being set to wash decks the moment they come from below, is not correct—in winter time this operation does not generally commence until after six o'clock, when the watch has been two hours upon deck attending, during that time, to the promiscuous duties of the ship—and in summer time, in proportion as daylight advances or recedes. Therefore the transition cannot be so very striking as to generate any doubt of its influence in a baneful point of view. Leaving, however, these rather wire-drawn suppositions, as the author himself has done with the remainder of his opinions, to "stand or fall according to their merits," we shall take a hasty glance of what follows on the same subject.—The profusion

* Large Portland stones in slings dragged up and down the deck for the purpose of scouring it. Those used with the hand are of different sizes, and usually called BIBLES.

of water thrown on the deck alluded to, the author must be aware is immediately swept away—and it is the exercise of sweeping that keeps up a temperature in the body equal to the resistance of the supposed temporary effects, not to say a word of the salubrious re-action that follows when the sailor has dried his feet and put on his stockings and shoes, which he abandons for the time, from choice, not from compulsion—in fact, it would be better for the health of many of the indolent part of the crew who, if left to themselves, would prefer a different line, actually to compel them to divest themselves of these appendages during deck-washing—that they might feel the good effects of them afterwards, instead of wearing damp stockings all the day long, and "turning in" with them at night to be dried by the natural heat of the body—this applies to every part of wearing apparel—and here lies the principal evil of moisture in contact with the body—were sailors provided with sufficient clothing to admit of their frequently changing themselves after exposure to wet and the damps of the night air, they would have little to fear from much more formidable enemies to their health than the laudable process of "*diurnal irrigation.*" Besides, we have yet to learn, when or where, in what ships and on what occasions ships' decks are washed when the "*thermometer ranges* either at or below the freezing point."

We shall conclude our Review of Doctor Finlayson's "Essay" in our next Number; of his medical or philosophical prowess he has furnished us hitherto with nothing from which we can deduce the least satisfactory result. With respect to his "nautical" experience, we are candid to say, that we entertain no very flattering opinion—and, as far as regards the ensemble of his book, we suspect he is not likely to acquire any very great degree of popularity as a writer, particularly on speculative subjects, &c. &c.

Five Cases of Varioloid Disease. By John Thomas Dennett, *Bognor, Surgeon, &c. to H. R. H. the Duchess of Kent.—Ibid.*

(Concluded from p. 360.)

Case IV.—L. M., æt $2\frac{1}{2}$.—Had been restless and feverish for two or three days previous to the 1st August, on which day a few spots were observed by the nurse, and mistaken for flea-bites. She was seen on the 4th, when an eruption of papulæ were observed on the face, neck and breast, having small vesicles on their apices. —5th. Spots have increased in number since; there are now many on the body, and a few on the lower limbs; they have been much irritated by scratching; the eruption appears to be chiefly vesicular, with a few pustules interspersed. Has passed a fretful, feverish, and restless night.—8th. The eruption has not increased; there are a few pustules, full and prominent, but they have mostly been destroyed.

Case V.—W. M., æt. 8 months.—*July 17th.* — Appeared indisposed, with some degree of fever; refused his usual food; sickness at stomach; small red spots appearing partially under the skin; restless at night; no appetite; bowels disordered.—18th. Increased indispostion, with fever; no appetite; spots more visible; restless at night; bowels relaxed.—19th. *Morning*, a continuation of the above symptoms. He was seen at 7 *p. m.*; there appeared a few spots on the forehead, face and neck, vesicular.—20th. (*4th day.*) Had a restless night; eruption out on the body and limbs, passing into the pustular state; the bases a good deal inflamed, has been sick, bowels open.—21st.—(*5th day.*) Pustules full and distinct, in other respects as yesterday.—22d. (*6th day.*) Mo material difference from yesterday.—24th. (*8th day.*) The eruption on the face and neck dying away, those on the legs full and prominent.—26th. (*10th day.*) Pustules dried up, and covered with a smooth brown scab.—*1st August* (*16th day.*) The crust, for the most part fallen off.

The above cases occurred in the family of Captain M—— of the Royal Navy. The first four children had been vaccinated by different medical gentlemen when young; the eldest at six weeks old, the three others at six months, and were reported to have had the disease satisfactorily. The cicatrices on the arms were very faint; on the younger ones, in particular, they could scarcely be discovered without the closest inspection. The infant had not been vaccinated. In the spring they had measles, and were scarcely recovered when they were seized with whooping cough; and, before they were free from the latter, they were attacked with this varioloid disease whilst they were at Brighton, where it is probable they were exposed to the contagion of small-pox, as children believed to have that eruption out on them were seen there by them; but from the circumstance of Captain M.'s perfect confidence in the protecting influence of vaccination, all suspicion was lulled, and there was not that close attention paid to the occurrence which would otherwise, no doubt, have been afforded. Indeed, to use his own expression, he scarcely thought it within the bounds of possibility for his children to have small-pox; and he came to Bognor without in the slightest degree suspecting the probable nature of the complaint.

From the circumstance of the unprotected infant having so mild a disease, it may admit of a doubt, whether this eruptive disorder owed its origin to small-pox contagion, and many may think that it was aggravated varicella; for in all the cases that have hitherto occurred, as far as my knowledge extends, the modified disease has produced genuine variola in all persons who had not been vaccinated, or who had not previously gone through small-pox; but, if the hypothesis, these varieties originate from the *same* contagion, be admitted, it follows, that in some individuals from certain peculiarities of constitution or other causes, the disease will have the character of variola, while in others it will put on the appearance of varicella. It may be observed, that there was no secondary fever in any of these cases, except in the eldest child. After I saw them, the children were very slightly indisposed, which perhaps may in some measure be attributed to their being kept a good deal in the open air.

In Case III., the eruption, in its progress and termination, was analogous to varicella. Upon the whole, I am disposed to coincide in opinion with the ingenious Professor Thomson, that small-pox, chicken-pox, and modified small-pox, all proceed from one and the same contagion.

Bognor, 7th October, 1822.

Cases of severe Burn, with Dissections and Remarks.

(Concluded from page 346.)

Case III.—M. S., ætat. 7, was admitted into the Royal Infirmary, December 21st, 1822, having the greater part of the abdomen, the left side of the body, the left cheek, a portion of the back, and upper part of both thighs, burned. The cuticle in several places had been raised into bullæ. Pulse 96, weak. The unburned parts of the body, and the extremities, were cold.—Turpentine dressings.

On the 22d, vesication had taken place over the whole burned surface. Pulse about 116 in the temples; could not be distinctly felt at the wrist. During the preceding night, had two attacks of convulsion of the limbs, and was very low, with cold extremities.—Wine, opium, external warmth.—Under this treatment, the pulse became rather stronger; but she was attacked with vomiting, and refused food. Opium, both externally and internally, and brandy, were now ordered. On the 25th, the symptoms had suffered a remission, so that she seemed, on the whole, better; but

she sank gradually, and expired in the evening.

On inspection, the omentum was found so vascular, that its colour approached to scarlet. The abdominal and intestinal peritonium was in many places crowded with red vessels. Portions of the intestines were in different places glued to each other by a thin layer of coagulable lymph. Near the termination of the ileum, there was an intus-susception from below, upwards of two inches in extent. When the intestines were slit open, the mucous membrane, especially of the small ones, showed strong marks of acute inflammation; and many gangrenous-like spots were seen in different parts of it. Two lumbrici were taken from the colon.

Case IV.—G. M., ætat. $7\frac{1}{2}$, was admitted into the Royal Infirmary, December 31st, 1822, having her face, belly, and inner side of both arms burned. The cuticle in some of the burned parts was raised into vesications, and from others it had been entirely rubbed off. Pulse 92, very week, feet cold. A little wine; turpentine dressings. On the 2d of January, 1823, the burned surface of the belly was in a state of suppuration, and she spoke and took food freely. She was troubled with cough, and the bronchi appeared gorged with mucous. Poultice to the belly; turpentine dressings to other parts. In the evening of this day, I found her complaining so much of pain in the abdomen and thorax, with rapid oppressed respiration, that I directed blood to be taken from the arm. Only four ounces were procured, which had a sizy appearance. Some relief of the symptoms followed, but in so small a degree, that the house surgeon was induced to apply a blister to the chest. Next day she was reported to have had a better night, but the pulse was 140, and she was exceedingly fretful. Several sloughs appeared now to be forming, both on the right arm and right side of the abdomen. Blood to be drawn from the saphena vein *pro viribus*. On the 4th she had a very restless night, with delirium, and the pulse had not fallen. No blood had been obtained from the saphena. The respiration was rapid, but deep inspiration did not seem to occasion pain. The symptoms continued to increase till the 8th, when a delusive, though slight, remission took place, and the burned parts presented a more favourable aspect; but she sank gradually, and died in the evening.

On inspection, nothing morbid presented itself within the cranium. There was a single old adhesion of much firmness on the left side of the chest. In the right cavity, several red patches were perceived on the pleura pulmonalis. The mucous membrane of the bronchi was very vascular; and the substance of the right lung contained in some parts numerous whitish tumours; two or three of which were as large as gooseberries. Both the peritoneal and mucous coats of the small intestines were in many places morbidly vascular, and several gangrenous-like spots were seen in the mucous coat. The viscera healthy.

Case V.—L. M., ætat. 27, was admitted into the Royal Infirmary January 25th, 1823, having almost the whole of the body severely burned. The cuticle of the thighs was wrinkled, and of a dark colour. The limbs, especially at their upper part, were very tense, and presented ashy grey appearance. She moaned much, and complained of thirst and cold; and was in a very exhausted state. No pulse was perceptible at the wrists, or in the temples; and the heart was felt vibrating feebly. Turpentine dressings, wine, anodynes. On the 27th she expired.

On inspection, the peritoneum lining the lower part of the abdomen, and that covering the greater part of the small intestines, showed a highly increased vascularity, which extended also to the mucous membrane, as was ascertained when the

intestines was slit open. No effusion of lymph or adhesions of the intestines; but ʒiss. of serous fluid were taken from the cavity of the abdomen. No urine in the bladder; kidneys appeared much firmer than natural. Two ounces of serum were found in the right side of the thorax, and ʒiss. in the left. Lungs more than usually loaded with blood, but otherwise healthy.

From a survey of these cases, it appears, that internal inflammation consequent on injury from burn, may arise in the head, in the chest, and in the abdomen; and that the tendency of the inflammatory action is to produce effusion within the cavities of serous membranes. It is also clear from these dissections, that the mucous membranes participate in the inflammation. That of the digestive organs is not, however, affected in the exclusive manner which the favourers of the new French doctrine of Broussais would lead us to believe; but, on the contrary, it suffers much less than membranes of the serous class.

POISONING BY OXALIC ACID.

(Continued from page 362.)

The three next experiments show its comparative effects when introduced, by the stomach, by the pleura, and by the cellular tissue.

Experiment 7.—Thirty-three grains dissolved in six drachms of water were injected into the stomach of a dog, weighing 18 or 20 pounds.

12′. Efforts to vomit at distant intervals, and not very violent.

32′. Efforts rare; he hangs the head; the respiration is smooth; deep, regular, and not quickened.

47′. The efforts to vomit have ceased; the breathing continues the same; he walks sluggishly, and looks dull; but is perfectly sensible.

1h. 25′. He is affected with a peculiar kind of somnolency. He sits with the head drooping much, apparently unconscious of any thing that goes on around him; yet he yelps when laid hold of, and is, in every respect, perfectly sensible. He breathes very smoothly and deeply. The pulsations of the heart are rather frequent and feeble. He staggers when forced to walk.

2h. 40′. Does not stagger so much. No other change.

4h. He is more feeble, but does not stagger, and is perfectly sensible.

24h. Some dulness, but he is quite sensible; and, except weakness, has no decided affection.

48h. Is both sensible and active; runs briskly about, and chews morsels of bread.

3 days. He was found lying on the side, nearly insensible, and breathing short and slow. When shaken and put upon his legs, he tries to walk, but staggers and leans on the wall. The hind-legs are very feeble.

3 d. 8h. Found dead. The body was examined 40 hours afterwards. The stomach was perfectly natural. There was no vascularity externally; and the internal membrane was quite entire, strong, and white. The wound in the neck had sloughed and suppurated.

Experiment 8.—The same quantity, similarly dissolved, was injected into the left pleura of a dog about the same size. He struggled violently; and, when let loose, ran to the other end of the room, apparently sensible, though dull.

10′. The breathing suddenly became hurried, and very deep, both in inspiration and expiration. He hung the head; and, though sensible, would not stir when struck. In a short while his tail was reversed, the respiration became very difficult, and almost suspended; and he sank gradually down upon the belly; the breathing then became easier for a few seconds.

11′. Another paroxysm of suspended respiration, during which the tail was still more distinctly reversed,

and the whole body spasmodically extended. Then, at

12′, the spasm relaxed; the whole body became flaccid; and two or three convulsive gasps ensued at remote intervals.

The body was examined two days after death. The *pleura* was quite natural on both sides. Some blood, extravasated around the incision, was completely charred. There was a quantity of dirty brownish-red, semi-fluid matter in both sacs, rather sweet to the taste, and reddening litmus. The lungs were here and there scarlet on their surface, and gorged posteriorly. The villous coat of the stomach had a brownish-yellow tint at its œsophageal end, and there was lined with bile; but at the pyloric end was rosy-red, and without bile. The whole intestines were natural, internally and externally. The moisture on the peritoneum did not redden litmus.

Experiment 9.—One hundred and sixty grains, dissolved in four ounces of water, were injected into the cellular tissue of a dog, weighing about 30 pounds, by a wound at the flexure of each thigh. The syringe was thrust three inches under the integuments; and, when the injection was completed, the wounds were carefully stitched, so that not a drop could escape. The fluid was felt forming different tumours on the lower part of the abdomen, and on the inside of each thigh.

13′. From the commencement of the injection, he had some weakness and stiffness of the hindlegs, and began to look dull.

45′. The hindlegs are scarcely sensible when pricked; but the sensation of the rest of the body is unimpaired; the breathing is deep; he lies on his side.

50′. He rose with peculiar stiffness, and lay down again upon the belly, with the hindlegs stretched out on one side, and the forelegs on the other: the hindlegs are always stiff, and sometimes convulsively extended.

1ʰ. 15′. The breathing became suddenly hurried. Soon afterwards there was some stiffness of the chest and neck. When raised, he stands stiffly in the same posture for a few seconds, and then sinks gently down upon the belly. He whines at intervals.

1ʰ. 55′. He is much duller, but in other respects seemed to be improving till now, when the breathing again became suddenly hurried. The heart beats with great rapidity, and with such violence as to be heard at a short distance. All the limbs are rigid, and the neck slightly so. Though very dull, he continues quite sensible, for he shuts his eyelids when the hand is waved before him, and he follows a basin of water carried up and down.

2ʰ. 12′. The breathing is still exceedingly hurried, but at times suspended for a few seconds; the heart still beats with extraordinary force; his dulness increases; he continues to walk about a little, but very stiffly; the tail has been gradually becoming stiff and straight.

2ʰ. 20′. The suspension of breathing is more decided, now evidently dependant on spasm of the thoracic muscles, and is accompanied with reversion of the tail. These paroxysms cause him great agony, and they become rapidly longer and more violent. Even in the intervals, the breathing is difficult, and expiration convulsive.

2ʰ. 45′. The pulsations of the heart are much more feeble, but still very frequent. The paroxysms of suspended respiration abate in violence, but the intervals are shorter.

2ʰ. 55′. The paroxysms have ceased. The whole body is relaxed, and in a state of complete coma; breathing short, frequent, and somewhat convulsive.

3ʰ. 30′. No change, except that the breathing is slower and shorter.

4ʰ. Breathing very short, and only 14 in a minute; the pulsations of the heart cannot be felt.

14ʰ. Found dead cold, and rigid.

The body was examined about 36 hours afterwards. The muscles of the belly, as high as the umbilicus and the superficial muscles on the inside of each thigh, were pale, greenish, and acid; but no fluid could be detected around them. The lungs were every where scarlet on their anterior surface, bluish-black posteriorly, scarlet internally, yet their air-cells natural. The blood of the vena cava and aorta was dark; and very imperfectly coagulated; there was nothing unusual on the inside of the vessels. [In another case of the same kind, the blood in the heart, and the exhalations of all the serous surfaces, and the frothy fluid of the bronchi, did not redden litmus.] The villous coat of the stomach was lined with bile, and stained brownish-yellow. The rectum was redder than usual, not vascular; and the rest of the intestines were perfectly healthy.

(*To be continued.*)

Of the Preservation of Public Health.

From Paris' and Fanblanque's Med. Juris.

(Continued from page 364.)

General recapitulation of the Cases of Submersion, during the year 1821.

I. Number of persons taken out of the water, who could not be resuscitated	234
Of the female sex	36
Of males	198
Of these there were:	
Children under the age of sixteen	23
Unknown	76
Suicides in men	54
Suicides in women	15
Accidentally drowned	55
Those who were less than 12 hours in the water	46
Those who were from 12 to 24 hours in the water	23
Those who were more than 24 hours in the water	165
II. *Persons taken out alive, or resuscitated*	75
Females	27
Males	48
Of these there were:	
Children under sixteen	16
Persons who wished to drown themselves	32
Accidents	43
Of the whole number that were taken out of the water, in Paris.	157
In the neighbourhood	152
Medical assistance was given to	50
It saved	87

"The cases of submersion, in the year 1821, amount to 309. In 1818, they were only 283; in 1819, they were 281; and in 1820, they were only 260. The report of 1821, then, is less favourable; it has too remarkable an excess above the others not to be observed. What is the cause of this excess? Does it depend on an increase of population? The opulence of Paris, the superabundance of means of occupation, the low price of provisions—every thing in Paris denotes a degree of prosperity, which excludes all idea of misery and want, but, on the contrary, gives rise to the supposition of great affluence among the labouring classes; to this we may add, that the accidents arising from bathing in the river, during the summer, have, in some years, been twice and three times as many as the largest number here quoted. This has generally happened during summers of extreme and long continued heat. But whatever may have been the case with regard to these 309 cases, 121 only had been less than twelve hours in the water; and of this number, 75 were saved, which gives us a proportion of nearly five to eight, or a little more than half. This result is the same as was obtained during the years 1818 and 1819. That of 1820, gave the more favourable proportion of three to four. But it is evident that, on a subject of this kind, considerable variation is unavoidable. The results obtained, depend on the compound ratio of the time the persons have remained in the water, and of their strength and resistance to the effects of the water. But the details given by M. Marc, sufficiently show with what severity he superintends the minutest details of the office confided to him; and it is easy to see that this important and

honourable branch of the public service will never receive its full developement, until the subscriptions of the public promote its prosperity. We have next a strong recommendation of an institution, like our Humane Society, to the public, and calling upon them to come forward to its assistance. We heartily hope that it may have the desired effect; but we fear that it will have the same fate as most appeals of this kind in France. The government has always done too much, and, by taking all charitable institutions, entirely into its own hand, has destroyed the sympathizing spirit of the public.

"Another work to which the council has directed the attention of the government, although unsuccessfully, is the making accurate researches into the history of the persons who have committed suicide, whose bodies are exposed at the dead-house. This is suggested, not only with a view of prosecuting researches of pathological anatomy, but also in order to discover the causes of this crime. In carrying up our inquiries to the causes of the mischief, we shall lay open those hidden evils which exist among us, and which drive so many unfortunate wretches to the last fatal act of despair. Perhaps we may find, also, that there are some which the government might correct, prevent, or diminish. For instance, the ruin which follows losses at play is a frequent cause of suicide. Every principle of morals condemns gaming. But this is not enough. It is necessary that the catastrophes and ruin arising from its baneful influence should be collected and published, in order that the general precepts of morality should acquire due strength, that they should be engraven on the heart, and find their way into our legislature. If the council dared dwell on such objects, which seem a little beyond its proper province, it would endeavour to reform the general maxim, that there is not a single voice which does not act on the corporeal structure, as well as on the moral character, after the manner of a poison; and that every immoral institution is to the latter a most insalubrious one."

Quarantine, &c.—The question which has been most agitated, and which is most important, is—whether epidemical diseases be ever propagated by contagion? On the decision, it depends whether we shall consider quarantine, lazarettos, &c. as regulations injurious to commerce, and suggested by ungrounded apprehensions, or as measures ensuring the safety of the community by the temporary inconvenience of some individuals. With respect to the plague, the point seems to be decided in favour of its propagation by contact, by the authority of a vast majority of those who are entitled to our confidence; and as a consequence it follows that its progress may be arrested by a vigilant system of police, cutting off every communication between the infected and the healthy. Such appears also to have been the case with the fever which lately prevailed in these dominions, particularly in Ireland. In the yellow fever, on the contrary, the weight of evidence leans decidedly to the opposite side, although the opinion is by no means universally received. There is every probability that the matter of contagion requires the aid of a certain state of the atmosphere, to give effect to its powers, and ensure its propagation; and it is only in this way that we can account for the appearance, course, and decline of certain diseases. It is doubtful whether filth and animal putrefaction can directly generate contagion; but we have every reason to believe that fevers produced by fatigue, &c., may be rendered contagious by such causes. These are the principal questions to which contagion has

given rise, and it is incumbent on the practitioner to make himself acquainted with the facts and arguments relating to them. Of the lazarettos of the Mediterranean, the authors say that the best praise of their regulations is to be found in their success; for though twelve months never elapse but that the plague rages in some part of the Levant, or of the coasts of Barbary, the infection has seldom reached the coasts of Italy, France, or Spain. Terrible exceptions may be adduced, yet they may generally be traced to some clandestine violation of the Quarantine laws, rather than to their imperfect execution, as in the recent instance of Malta, where the cupidity of a smuggler introduced the pest into the island, to which he and his family fell the first victims.—Vol. I. p. 130. An attempt made before a Committee of the House of Commons, to disprove the contagious nature of the plague, totally failed; "and to those," says Dr. Paris, "who consider our long immunity from the plague a sufficient guarantee for our future security, it may be observed, that, although the island of Malta is, from many causes, much more exposed to this infection than Great Britain, yet it was free from plague for 138 years, a period exceeded in our own case by only sixteen years." We must pass over other less important branches of medical police, such as the adulteration of medicines, the sale of poisons, the regulation of bills of mortality, &c. and proceed to the second part of the work.

(To be continued.)

Fatal Consequences resulting from Slight Wounds received on Dissection.

(Continued from p. 351.)

Dr. Colles has made some reflections on these cases, which he thinks present us "with the character of a disease both formidable and new."

"The severe pain felt on the point of the shoulder; the peculiar colourless swelling, or fulness above the clavicle, within a few hours after the infliction of the wound; the wound itself at this time free from inflammation or pain; no red streaks, no pain, nor even tenderness on pressure through the whole course of the limb. In short, no trace at the time of any morbid connexion between the wound and the seat of the pain, were the most remarkable features of this disease."

Another remarkable phenomenon was the peculiar appearance of the pustules, (unlike to any he had ever witnessed) particularly the pustule on the fore-arm of Mr. Dease, which could not have been from the wound made by the lancet, as this pustule was below the incision, the intervening skin between it and the pustule being natural. The resemblance of these elevations to vesications, while to the touch they felt solid, was another peculiarity. Our author cannot agree that the swelling on the side of the chest, in these cases, was of an erysipelatous nature, as the redness was of a bright healthy colour, and did not occupy more than a sixth part of the swelling.

Dr. C. observes that, however we may dispose of the disease, in a nosological way, it is obvious that neither habits of dissection the most lengthened, nor a state of dead body the most free from putrefaction, can secure the anatomist from the danger of this formidable disease. Mr. Dease had been in the habit of dissection for more than twenty years. In Dr. Colles's recollection he found most of the instances of inflammation and fever following wounds received in dissection, among those pupils who had arrived at the third season of their anatomical pursuits. We are disposed to think Dr. Colles is not correct in supposing that it is a generally received opinion among the profession, "that the danger from wounds in dissection is in proportion to the putrefaction of the subject, or

to the contagious nature of the disease which had caused death." The best informed anatomists of this country do not entertain such an opinion, their experience coinciding with that of our author as expressed in the following passage.

"On the contrary, according to my observation, unpleasant consequences have been so rare, where the subject was far advanced in putrefaction, as to induce me to think that putrefaction rather gives protection to the anatomist; nor could I trace any connexion between the disorder in question, and the contagious nature of the disease which had destroyed the subject of dissection, and surely during the winters of 1818-9, when fever raged so extensively in Dublin, we should have had some striking instances of such a connexion had it existed. Perhaps the majority of the affections in question have occurred in cases of examination of bodies to ascertain the cause of death, and where the body had not even been interred."

Dr. Colles has never witnessed any of those dangerous constitutional affections which are mentioned by some authors, as attending the dissection of bodies in a state of putrefaction. In respect to the question whether we are to attribute these accidents to a poison or septic principle inoculated, or merely to the puncture itself, in a peculiar state of the constitution — we would be disposed to answer, in the absence of demonstrable proof, that there is great reason to suppose some poisonous matter introduced — the effects of this being modified by the state of the constitution at the time. The consequences of mere punctures by common instruments, in the various avocations of life, are very trivial, and, when they do become serious, are of a very different class from those following dissection wounds. We allude to the tetanic affections occasionally following slight wounds, especially in tropical climates.

As our author cannot offer any thing consolatory in the way of treatment, it is the more incumbent on anatomists, he reasonably thinks, to attend to the means of prevention.

"The advantages of the immediate application to such wounds of caustics in a solid or liquid form, is too obvious to require any comment; they are the only means upon which we can rely with absolute certainty. But those who are acquainted with the zeal of anatomists must doubt whether any practice which interferes with the prosecution of their pursuits will be generally adopted; the pain and the delay which must be occasioned by applying caustic to every little scratch, will prevent this plan from being as generally followed as it should be, or as the safety of individuals require. I would therefore recommend that each dissecting table be furnished with a cup of oleum terebinthinæ, into which the anatomist should plunge his finger the moment it is wounded. The smart which this produces is so inconsiderable, that it will not cause any serious delay, while the irritation may counteract the power of infection, or alter the mode of inflammation in the wound."

We may be permitted to remark that, for many years past, the precept and example of Professor Chaussier have been adopted in the anatomical schools of Paris. Each student keeps in his pocket a small phial of the liquid butter of antimony (muriate of antimony), and whenever he wounds himself in dissection, plunges the point of a little wooden pencil into the caustic, and quickly cauterizes the puncture or wound. We, ourselves, would recommend the strong nitric acid, where the wound is tortuous, or made with a sharp pointed instrument, as this liquid immediately penetrates every part of the puncture, and completely disorganizes its parietes, thereby rendering them incapable of taking up any part of the septic principle. When, unfortunately, the poison has

taken effect, we know of no specific means of checking its progress, and therefore we are obliged to combat the symptoms on general principles, for which no rule can be laid down. When we reflect that the inflammation produced by these punctures is of a specific kind, and attended with a peculiar constitutional derangement, we much doubt the propriety of that active system of depletion which is so effectual in common phlogosis and acute inflammatory diseases.

Practical Observations. By JOSEPH SWAN, *Member of the Royal College of Surgeons, and Surgeon to the Lincoln County Hospital.*

Case of Severe Burn.—Joseph Baily, ætat. five years, was burnt by his clothes catching fire about 2, *p. m.*, on the 2d of June, 1822. A bucket of cold water was thrown over him, for the purpose of extinguishing the flames, and he was soon after removed to the county hospital. The injury chiefly extended over his arms and legs, and a small portion of his back, but in none of these places was it by any means severe. About six inches of the skin over the epigastrium were slightly burnt. Oil was applied to the injured parts soon after the accident; and on his admission into the hospital, cerate rosin, to which spirit of turpentine had been added, and fifteen drops of laudanum were given him.

He was restless, and vomited, and in the night became insensible; in which state he continued until 6, *a. m.* of the 4th, when he died. At different times he vomited a blackish matter, and the day before he died, appeared so weak and cold, that a little wine and sago were given him.

Examination.—Opening the abdomen, every part appeared sound except the stomach, in the villous coat of which were several spots and stripes like sloughs, extending deep, and quite black. The lungs were sound; but some purple spots appeared behind the pleura, forming the posterior mediastinum. Every other part in the chest was sound. The membranes of the brain were much more vascular than natural, and especially the velum interpositum, and about the pons varolii. There was not more fluid than usual in the ventricles, but there was about an ounce at the foramen magnum.

If any conclusions may be drawn from this case, respecting those who have been burnt, I think opiates ought not be given, nor any stimulants, but that the patient should be purged; and if coma comes on, and the head is much affected, leeches should be applied to the temples.

There can be no doubt that the diseased appearances of the head and stomach were produced by the irritation of the skin; and, therefore, I think all applications tending to increase this state should be avoided.

Cases of Apoplexy.—Case I.—Mrs. Biscoby, æt. 70, after walking about two hundred yards, ran about twenty more. She immediately complained of being out of breath and faint, and in a very few minutes expired.

A few days before she died, she had been twice very dizzy, and in consequence fell down. She had for a long time been troubled with a difficulty of breathing, and her legs had swelled a little; in every other respect she enjoyed perfect health. She was not extremely corpulent, but was sufficiently fat to show that her body was well nourished. This account I received from her friends.

Examination. — On opening the head forty-eight hours after death, all the vessels were found filled with black blood. On cutting into the brain, it was rather softer than is usual at her age, but it had a healthy appearance, though every part of it was gorged with black blood, as in a person who has been hanged. There was rather more fluid than usual in the lateral ventricles. There was some fluid about the base of the brain.

The basilar artery had some spots of ossification on it, otherwise every part of the brain and cerebellum, and the part of the medulla spinalis examined, had a perfectly healthy appearance. On opening the chest, the right lung was perfectly sound, but was distended with air. The left adhered every where to the side of the chest, and it was so soft as to give way on being gently pressed by the fingers, and therefore was not separated without some difficulty. It had not an altered colour, but had a pulpy appearance. There was a small quantity of fluid in the chest.

There was more than an ounce of fluid in the pericardium; but the heart had a healthy appearance, except in one spot, about the size of a sixpence, towards the apex, which was white, as if inflammation had formerly existed there. There were some slight ossifications in the mitral valves. The aorta was very large, and had many patches of ossification on it. Every part in the abdomen was sound, except that there had been a femoral hernia; and a small portion of the cæcum was thickened, which, in all probability, was the effect of a frequent protusion.

In this case, there was no appearance of change of structure to account for death; and it is most probable that, if the patient had been bled and purged when she felt the dizziness, her life might have been preserved. In this case, the blood either could not pass through the lungs, or was not oxygenized by them; so that the accumulation of venous blood in the brain destroyed life.

I conceive that apoplexy depends more frequently on the difficult transmission of blood through the lungs, or from its not being properly oxygenized, than is imagined. A stomach overloaded by wholesome food, or containing a small quantity of indigestible food, deranges all the parts to which the branches of the par vagum are distributed; and therefore the lungs do not perform their functions; in which cases, though bleeding is absolutely required, the greatest quantity of blood may be taken away without affording complete relief; therefore, if a person is seized with apoplexy, and bleeding has not afforded relief, and there is no symptom of paralysis, and it is probable the stomach contains undigested food, it is advisable to give an emetic.

Case 2.—A boy, about fourteen years old, after working hard the whole day, eat a very hearty dinner. He immediately became insensible, and continued so several hours. I bled him, but he was not in the least relieved; I then gave him an emetic. After some time he vomited up what he had eaten, and became immediately sensible.

Case 3.—A gentleman, about fifty-eight years old, was seized with apoplexy. I took much blood from him, but he was not relieved. I gave him an emetic, which made him eject the remains of his dinner, which he had eaten six hours before, and he was immediately relieved.

Case 4.—A little girl, nearly three years old, could not eat her breakfast as usual; and shortly after complained of being sleepy. In the course of a few hours she became insensible, and was seized with convulsions, which were so severe that I every moment thought she would expire. I was asked to bleed her, but refused doing this, because she appeared so nearly exhausted; and I firmly believed such practice might prove fatal. I gave her, in divided doses, nearly forty grains of powdered ipecacuanha. At length, by irritating the throat with a feather, she vomited a quantity of very thick mucous. The convulsions immediately left her, and she shortly after spoke. In a few hours she became perfectly sensible. She was purged, and had four leeches applied twice to the temples in the course of the day; and a few days after she was quite well.

Professor Dollinger's Experiments on the Pulse.— Our readers may compare the following remarks with the theory of the late Dr. Parry, which has excited so much notice. M. Dollinger, on visiting some water-works, observed, that on grasping the lead pipes into which water was forced upwards by pumps, he could plainly perceive an impulse at each successive wave, very much resembling what is felt in the arteries. As this could not arise, as he ascertained, from the trembling of the pipes, which were well secured, nor from the vibrations of his hand, he was anxious to find whether the same effect would be perceived in any artery when laid bare. In the presence of his pupils, accordingly, he laid bare the carotid of a dog, and though no motion could be seen by the eye, the pulse was distinctly felt. He hence concluded that the arteries suffer no alternate contraction or dilatation. The pulse is therefore, he thinks, produced by the wave of blood, the impulse being communicated without the artery suffering any dilatation, in the same way as the last of a series of elastic balls is moved by an impulse communicated to the first, while the intervening ones are unmoved.—*(Magazin der gesammten Heilkunde.)*

M. Eusebe de Salle on Physiognomical Pathology.—To obviate the difficulty of diagnosis in the diseases of children, M. de Salle proposes to have recourse to physiognomy. This is no novelty however, though some of his details are both new and problematical. For example, he tells us that the line which runs from the alæ nasi to the angle of the mouth, when pronounced in an unusual manner, is a certain sign of intestinal inflammation. We do not think that much benefit will result from M. de Salle's investigations, unless they take some more distinct form than the present.—*(Report of the Acad. Royale de Paris.)*

HOSPITAL REPORTS.

Guy's Hospital.—John Aberdeen, æt. 32, was brought into this Hospital with a compound fracture of the left thigh, in consequence of a fall from a scaffold—the bone protruded between 3 and 4 inches, and the knee-joint was laid open by a fracture through the centre of the condyles:—amputation was immediately proposed by Mr. Key, to which the man obstinately refused to submit, until about three hours after the accident. The patient is better than, under such unfavourable circumstances, could have been expected.

St. Thomas's, July 18.—Mr. Travers removed an irregular purple-coloured tumour (nævis maternis) from between the shoulders of an infant.

Case of Lithotomy in a young subject deferred in consequence of not being able, on sounding, to detect the stone previous to the operation.

Middlesex Hospital.—A lad, ætat 16, on Wednesday (July 17th,) unfortunately fell from a window, while cleaning it, a considerable height from the ground—for which accident he was brought into this Hospital, with stertorous breathing, bleeding from the nose—insensible dilated pupils—in fact evidently labouring under compression of the brain. In addition to these symptoms there was a fracture of the inferior extremity of the ulna, the bone protruding through the skin—the splintered end of which, it is thought, wounded the cubital artery and nerve, which were suggested to be the case from the profuse hæmorrhage and the tetanic symptoms that ensued.—His head was shaved, and cold lotions applied—Sinapisms to the feet which were extremely cold. He now lies very bad, and little or no hopes are entertained of his recovering.

This day is published, Price 5*s.* boards,

A TREATISE on PRACTICAL CUPPING: comprising a review of the Antiquity of the Operation; an historical relation of its descent through ancient and modern times; an enumeration and delineation of the various instruments which have been used; and a copious and minute description of the several methods of performing the operation, with instructions by which it may be acquired with facility, and practised with dexterity and effect.—By SAMUEL BAYFIELD, Surgeon, Cupper to Guy's Hospital.—With Plates.

ERRATA.—First page, under Dr. Gall, of our last Number; instead of ILLUSIVE read MORAL LIBERTY.—Under Hospital Reports, July 10th, 6th and 7th lines, read—*removed one arm from the socket of the shoulder-bone.*

London:

Printed by E. JUSTINS, 41, *Brick Lane, Spitalfields.*

Published by COX and SON, St. Thomas's Street, and 39, High Street, Southwark. Sold also by Sherwood, Neely, and Jones, Paternoster Row; Simpkin and Marshall, Stationers' Court; John Cox, Berner's Street, Oxford Street; Callow and Wilson, Gerrard Street, Soho; W. Stewart, South Bridge Street, Edinburgh; Hodges and M'Arthur, Dublin; &c. &c.

END OF VOLUME I.

THE WEEKLY

MEDICO-CHIRURGICAL & PHILOSOPHICAL MAGAZINE.

No. XXV.] SATURDAY, JULY 26, 1823. [*Price* 4*d*.

" FLORIFERIS, UT APES, IN SALTIBUS OMNIA LIBANT
OMNIA NOS, ITIDEM, DEPASCIMUR AUREA DICTA."

On commencing the Second Volume of our labours, we beg leave to return our most sincere thanks to our numerous friends and readers, for the liberal patronage they have been pleased to confer upon the humble merits of the New MEDICO-CHIRURGICAL *and* PHILOSOPHICAL MAGAZINE, *from the first period of its publication down to the present moment.*

In their original promise, the Editors have endeavoured, as far as the nature of things would permit them, to adhere; and it has been a source of no small gratification for them to have received various testimonials to this effect, from many distinguished branches of the profession, not only on the spot, but from various parts of the united kingdom—and, although the MEDICO-CHIRURGICAL MAGAZINE *cannot yet boast of a very extensive diffusion over the European continent, it nevertheless has, long ago, found its way, (the East Indies included) to the principal seats of learning and the arts:* PARIS, VIENNA, BERLIN, STOCKHOLM, *and* COPENHAGEN; *whither it is regularly forwarded, and, upon increasing demand.*

At home our sale, if it do not considerably surpass, as we have cogent reasons to apprehend it does, is, at least upon a par, with the most extended circulation of any contemporary periodical of the same nature, in the same ratio with respect to quantity of matter, &c. not to say a word of the comparative and important difference of the price.

Our first impressions were extensive—our anticipations have been realized:—many of the Numbers are, others nearly so, out of print—and such is the demand for back numbers, that it is actually in contemplation to re-print many of them for the accommodation of those gentlemen who may be desirous of making up their parts;—as well as to complete a stated number of volumes, for such as may not, for the want of established channels of conveyance, have been enabled regularly to procure the work, &c.

In the future course of their labours, the Editors will not suffer any thing to pass unnoticed that can possibly add to their recommendation or render them more interesting. They have been favoured with a variety of new suggestions, of which they intend to avail themselves—and their friends have reiterated their promises to contribute towards their efforts whenever cases of public interest and importance, shall present themselves to their notice. Moreover, on all occasions, as the columns of the WEEKLY MEDICO-CHIRURGICAL *and* PHILOSOPHICAL MAGAZINE, *adhering to its first principles, are "open to all parties and biassed by none," original communications and documents, of every description, will invariably take precedence of all other matter.*

BIOGRAPHICAL MEMOIR OF THE LATE JOHN HUNTER.

This bright ornament of modern surgery, whose name is still, and ever will be, revered by all who venerate departed worth, blended with professional excellence, was the youngest of ten children of

John and Agnes Hunter, of Kilbride, in Lanerk: he was born on the 13th of February,* 1728, at Long Calderwood, a small estate belonging to the family: his father was descended from the Hunters of Hunterstown, an old family in Ayrshire; and his mother, the daughter of Mr. Paul, a very respectable man, and the treasurer of Glasgow. That his parents were respectable there cannot be a question, from the manner in which their children were brought up.

As it is our intention, in the course of this Memoir to speak only of John Hunter, his progress in life and professional eminence, we must necessarily pass over a variety of domestic matters collaterally connected with him in this respect; all of which are highly creditable and respectable.

John Hunter being the youngest child, and born when his father had nearly attained his seventieth year, it was not to be wondered at, that he became a favorite with the whole family. Ten years after his birth, his mother was left a widow. He was now the only son at home, and one or both of her surviving daughters were married.

There is a general report, that Mr. Hunter was destined to be a carpenter; and one of his biographers go so far as to say, "a wheel-wright or a carpenter he certainly was." Had he really been a wheel-wright, a carpenter, or the son of a carpenter, his discoveries would not be the less brilliant, nor his industry less meritorious. We are told by Sir Everard Home, that "about this time Mr. Buchanan, who had lately come from London to Glasgow, to settle as a cabinet maker, paid his addresses to Mr. Hunter's sister, Janet; and having many agreeable qualities, she was induced to marry him, though contrary to the advice of her relations. This marriage gave the family great concern; for the very qualities that rendered Mr. Buchanan so agreeable, were the means of leading him into dissipation, and to neglect his business. Mr. John Hunter, who was now seventeen years of age, went to Glasgow upon a visit to his sister, for whom he had the greatest affection, to comfort her in her distress, and to endeavour to assist her husband in extricating himself from difficulties; but finding, after some time, all his efforts were ineffectual, he returned to Long Calderwood.

It was in all probability, during this visit to Glasgow to his brother-in-law, that he may be said, if even it actually was the case, that John had a hand in the glue-pot. In most towns at a distance from the metropolis—and in Scotland in both large and small, the trades of carpenter and cabinet-maker are united. As there is nothing disgraceful in either occupation, it seems a matter of little importance which was Mr. Hunter's, or whether he was engaged in both—nor are precedents wanting when as great men as John Hunter sprang up in the world from more ignoble callings: and it is but fair to assert, not only from probability, but from well-authenticated local tradition, that John did work at his brother-in-law's trade.

(To be continued.)

---

* In the life, by Sir Everard Home, Mr. Hunter's birth, is dated July 14. His birth day is celebrated at the College of Surgeons on the 14th of February; but the register, with a copy of which I am honoured by the Rev. James French, minister of the parish, says February 13.—(*Adams's Life of Hunter.*"

† Mr. Hunter, we are told, was descended from an ancient family: it is worth remarking that many of our illustrious families derive their names from offices which were likely to bring their ancestors most about the royal person. Hence the Butlers and Stewards, probably too the Spencers and the *le Dispensers;* and it is not improbable, that the first of the race from whom the name of Hunter is derived, might have been an attendant on a royal sportsman. The armorial bearings of the family seem to confirm this conjecture. But, whatever may be the antiquity of Mr. Hunter's family, future historians will scarcely take the trouble of tracing it farther back than the eighteenth century.

DR. GALL.

OF PARTIAL ALIENATIONS.

Nothing is more common in madhouses than to see individuals alienated relatively to one single idea or propensity, and in their perfect senses with respect to every other relation. One of these description imposed so far upon a minister who visited him in the Bicêtre, and knew so well how to persuade him that he was the victim of the cupidity and cruelty of his relations, that the pious pastor proposed to have his complaints examined, and to procure him his liberty. But at the moment he was taking leave of the unfortunate man, promising soon to return to him with good news, your Excellency, replied the latter, shall always be most wel-

come, provided it be not on a Saturday, because on that day, the Virgin Mary pays me a visit. A justice of the peace went to the Bicêtre, to set at liberty such as were thought to be cured. He interrogated an old husbandman, who did not suffer a single incoherent answer to escape him. The verbal process relative to the state of his health was, according to custom prepared, and given to him to sign. But judge the surprise of the magistrate to see that the poor fellow instead of subscribing his own name, stiled himself Jesus Christ; and, at the same time gave himself up to all the reveries which that idea suggested to him. A goldsmith imagined that some one had changed his head. He also thought that he had found out perpetual motion. Tools were given to him, and he began to work with the utmost perseverance. He did not, it is true, find out perpetual motion, but he made the most ingenious pieces of machinery, which suppose the most profound reflexions and the most correct combinations. Individuals are frequently seen sensible in all other respects, who believe themselves to be generals, ministers; monarchs, in fact, who imagine themselves to be God himself. Every work on mental alienation relates a great number of these examples. It is enough for me then to apprise my readers, that there are partial alienations with respect to evil propensities which lead to illegal actions, equally as there are with respect to other faculties. Proof of this may be found in several of the examples which I have cited, and in others which I shall relate as we proceed.

(*To be continued.*)

"*Essay on Deck-Washing,*" *&c. by* ROBERT FINLAYSON, M.D. *Member of the Royal College of Surgeons, and a Surgeon in the Royal Navy.*"

(Concluded from p. 373.)

In our last week's number, we condescended to take a cursory survey of this non-medical, unsailor-like, antiphlogistic, semi-barbarous, milk and water production, as far as it regards the washing of ship's decks, its "baneful consequences," &c. &c. indeed, we began early to regret that it should for a single moment have occupied our attention; for, certainly, such another mawkish tissue of absurdities and incoherences, hops, skips, and jumps, *e. g.* "*of the means of preventing drunkenness, and ascertaining the air's capacity for moisture,*" alloyed, and cooked up in one and the same chapter, never perhaps before found its way out of the free press of a christian and enlightened country.

We repeat again, that we could most heartily have wished to have seen Mr. Finlayson nearer home: had the subject been Sibbens, Yaws, or even Psora itself—a short treatise, in fact, on the "*diurnal bleedings*" of the navy, might have been more acceptable.

Previous, however, to dismissing the sublime subject of deck-washing, and before entering upon any of those which follow, we shall instance a small specimen of the sagacity and wonderful penetration of the author, that shall set the matter so far at rest, as to preclude the possibility of our even again directly adverting to it, in any shape.

"It is painful to remark, that there generally exists an *unbending disposition* on the part of an *executive* officer, to yield to the *suggestions* of a surgeon, however *salutary his injunctions* may be; partly, it is true, because *this* is not the source *from which* orders should be issued; and partly too, from a certain *esprit* du *corps*, and a belief that the customary *means* are preferable."

Mr. Finlayson, throughout the whole of this sentence puts us in mind of a stuttering man, who labours hard to get a word out, which when once ejaculated is never retracted. The language is beyond criticism—the meaning of it, should it have any, is too enigmatical for intelligible application. We can pardon bad French in any one who writes worse English, but we can scarcely

find any excuse, not allied to presumption, for a man talking nonsense, that is, at least, upon subjects with which he has not any sound practical knowledge to support what he chooses to advance.

Mr. Finlayson tells us that he was *once* in a line of battle ship where the surgeon recommended dry-holy-stoning the lower deck in place of washing it—but the captain, he observes, "preferred the latter method, and *firmly persevered in it.*" What was the consequence of this piece of obstinacy on the part of the captain refusing to comply with Doctor Finlayson's "salutary injunction?"—Why, forsooth, the

"Consequences were, *that* the lancet was *kept going* by the SURGEON, to *retard* the ravages of inflammatory disease, occasioned by *continual* humidity; and the water buckets were daily *kept plying* on the lower deck, by the captain's orders, on the alledged principle of allaying the dust and sweetening the ship."

For the other therapeutical agents employed by Mr. F. in counteracting the *ravages of this inflammatory disease*, and what were the characteristic symptoms of the disease itself, we are left completely in the dark. We know nothing more on the subject, than it was occasioned by the captain *persevering* in the long-established and time immemorial practice of washing the decks with water and scrubbing-brushes, and afterwards swabbing them dry. The name of the ship—the station—season, and date of the year—in fact, not a single vestige of any thing that can stamp the attention with the smallest portion of probability. Far, however, from wishing to impugn the veracity of the author of the "Essay," we should, nevertheless, had we been on the same very notable station, have particularly remarked the leading points, in order to the elucidation of the cause by every possible reference to identity. Nor does the paragraph which contrasts with the preceding convey to us any better conception of Mr. Finlayson's authority.

"In the following year, says he, the same ship was commanded by another captain, *attached* to the same station, and performing exactly the same kind of service. This officer happened to be one of the few who recommended keeping the lower deck *perfectly dry*: and such were the *happy consequences* of this change, that not a single case of acute disease appeared for several months, and the *medium* number on the *sick-list* did not amount to one third of that of the preceding year."

This solitary case, were it even authenticated, what does it prove? Why merely that the ship's crew were more healthy one year, than they happened to be the preceding. Were there any more ships on the same station at the time? what methods did they adopt to keep the lower deck clean? What were the results? Nothing — Mr. Finlayson knows nothing at all about this:—and yet he writes "an Essay," and dedicates it to the first lord of the admiralty—a dedication too, that does the author just as much credit as any other part of the production.

Not satisfied with *talking* about "cleaning a ship's hold" and of "bilge water," in the manner the least calculated to "*suggest*" any ideas for the amelioration of the health of the ship, as far as these two considerations are, in a certain degree, at variance with such a state, Dr. Finlayson takes it upon himself to tell us, that iron cables are better than hempen ones—he may "tell this to the marines but the sailors will never believe him." Also, that cables are saturated with moisture after they are *hove* in upon deck, and that it is a very injurious custom to "coil them away below" in such a state. Pity the captain does not order the cable to be coiled away in his cabin until they dry, and in the mean time occupy the cable tier himself.

"First by conveying moisture into the tier, from which a continual evaporation is *kept up*; and thus the *inmates* of the lower-deck are not only doomed to suffer, by INTERNAL, but from all CIRCUMAMBIENT CAUSES!!!!"

"Farther, *humidity*, like *caloric*, has a tendency to equilibrium: hence, the ham-

mocks, men's clothes, and every article on the lower deck absorb moisture, until they reach an equal state in point of saturation with the *mean* of the surrounding objects."

Mr. Finlayson, perhaps, may be able to inform us how long a time it will take for a first rate to absorb moisture enough either directly from the sea or from the *circumambient* humidity, so as to be completely saturated. One might suppose Mr. Finlayson to have but very poor and imperfect notions indeed, of comparative anatomy, at least; for he talks only of the absorbents, not a word about the exhalants—and, admitting that every article on the lower deck absorbs moisture, not even excepting the ring bolts; Mr. Finlayson surely does not mean to say they do not give it out again, and that, long too, before any of them have reached the saturating point. We are much afraid Mr. Finlayson has never looked above the "lower deck"—or rather that he has been too long *stowed away in "the hold"* to have any very extensive knowledge of what goes on above board, either in a first or in a last rate.

We were about to dismiss Mr. Finlayson's Essay, with disgust, when we were arrested once more by the pathos that *gleams* so resplendently in almost every page. Of his "IMPURE AIR" we'll have none of it, or at least very little.

"But the great and bountiful author of nature has secured us against such a *risque* (choking) by the universal diffusion of atmospheric air *over all habitable space!! !*"

"But as *atmospherical mutabilities* arise from causes we are seldom able to *counteract*, they are only to be *guarded* against by suitable clothing."—Neither air, diet, nor exercise are necessary.

On this subject it would be attributing a philosophic and argumentative reason which the essayist by no means possesses, were we to follow him any longer. We shall therefore shift the scene to *windsails and stoves*, which our author states "may very properly be *nominated a remedium miserabile*. From these we come to the drunken part of the concern, and where we might well have expected some sober reasoning, with a few grains of allowance, particularly on a subject that has so long interested every jack tar, from the admiral to the cook's mate's minister, since ever the materials for making grog have been known in the navy. Remark what follows.

"The bad effects of drunkenness in the navy stands next *in point of fatality*, to the pernicious influence of humidity on the health of British seamen. It is not only the sin which most *easily besets* English sailors, *but British subjects in general! !!!*"

Every one is aware that a sailor, that is to say, the generality of them, will get a little *by the head*, either at sea or on shore, when the opportunity is presented; but that drunkenness is at all so prevalent in the navy as to call forth such premature strictures and censure from the hard mouth of a raw native of the Hebrides, or any one else, is at once an assertion without foundation, a base and unmerited reflexion on our brave commanders who are known to be more severe with regard to this vice on shipboard than with many others of equal enormity; and so wide of truth, that we can safely appeal to those latterly as well those immediately in active service, to say whether drunkenness be not less frequent in the navy, and much less still, in proportion to numbers, than could possibly be well imagined from the well-known propensity of seamen to drink. But what must we say of the man, whoever he may be, who thus brands the whole country as a nation of drunkards? We must do here as paddy did with the jackass, make short work of it, and "impute it to his ignorance:"—though we now find out, that humidity is among the least of evils, since the author, *in fatality*, compares it only to drunkenness.

"It has long slain its tens of thousands, and its *seducing and soothing influence* over the *sensorium, seldom or ever suffered mortal*

escape, that once came under its powerful dominion. Drunkenness may truly be *nominated* an incurable disease, and is only to be *evaded by guarding against its commencement !!!*"

Speaking of the quantity of grog* allowed in the navy per diem (½ pint of rum mixed with three half-pints of water) Mr. Finlayson remarks with his usual discernment and experience no doubt in this way, that—

"Doubtless there are a number of *mariners* who can drink this quantity, and on many occasions with much benefit, yet there are many otherwise strong men, who are literally made drunk *by* their grog; and many men who are weakly, and those labouring under incipient pulmonary, and hepatic affections, are hastened to that "*bourn from whence none return*," by the daily stimulus of their allowance."

We shall now only quote, we have done commenting upon this Essay—there can, we are sure, be but one opinion on its merits; and we will not insult the good sense of our readers by directing them to every spot where the rank manure has fallen,—these will shew themselves."

"As a suitable allowance to valetudinarians, and those of a certain *idiosyncrasy of constitution*, cannot *be laid down by rule, it* is only to be regulated by an officer having a *minute knowledge of the respective individuals.*"

This would be a hardship indeed! to deprive a sailor of the greater portion of what he loves so dearly—his grog—merely because the whole of it taken together affects him more than if the same quantity were given at different times—say, at twice.—But, can the shallow-pated Essayist think of no substitute for the *valetudinarian*, but privation? Is there no wine on board—no tea, sugar or tobacco, or any such articles that could indemnify those who might not be seasoned to their full allowance of grog, or who, from the state of their health, might be prevented from enjoying it? Sailors are known to sell *their grub* for grog, and to sacrifice even their grog for tobacco when this article is scarce. Never take away a sailor's grog from him, poor fellow! it is his grog, and what is more, the very idea of it, long before it is served out to him, that often beguiles away many a live-long day and tedious hour—in short, as the song says,

"For grog is the liquor of life,
The delight of each bold British tar;
It banishes sorrow and strife,
And softens the hardships of war."

Sailors have but very few comforts and indulgences, and depraved indeed, and insensible into the bargain, must that man be who, for a moment, could wantonly or inconsiderately seek to rob them of the smallest they possess.—Had Mr. Finlayson read Turnbull's Navy Surgeon, he could have borrowed there to advantage. His odds and ends are injudiciously selected and as badly arranged. A worse production, for an "Essay," after "ten years experience" we never read. A more untechnical jumble, either in a nautical or a medical point of view,—a more fulsome, fraught with nothing, idle, uninstructive and irrational effusion of strangulated and unnatural abortions, were never before, we verrily believe, linked together in the same string, in the shape of a book for the edification of mankind, who look for information, not for "rant and rubbish," whether it may come from a mere theorist or the refined man of practice—from an M. D. or an apothecary's boy.

That Mr. Finlayson's antipathy to *water* and *hemp*, or even grog itself, should be very natural, no one will presume to deny; but he should nevertheless recollect, in the midst of imagination's airy and evanescent dreams, that, what is poison to one man is meat to another.

We have neither room, time, nor inclination to follow Mr. Robert Finlayson an inch farther. The "DRY

* We suspect Mr. F. to have been in the habit, like many other green-horns, who find their grog too much for them, or their appetite too formidable to live upon their allowance, of bartering it away for dog's-body, on a ban-yan day.

ROT," is a rotten concern—his ventilator, a mere puff, and only serve to manifest in a more conspicuous degree, that general dilapidation and paucity of intellect so visibly pourtrayed throughout the whole structure of his already mouldering Essay. Let us hope his next will be less fungous, consequently more within the range of liberal criticism; when, as a matter of course, the due meed of comparative merit, at least, will be awarded to his labours.—" *Magna est Veritas, &c.*"

True Scurvy in the Milbank Penitentiary.

It is a very singular fact, and highly worthy of attention, that the genuine sea-scurvy has lately appeared, and even raged in the Penitentiary at Milbank, in consequence of an attempt to feed the inmates chiefly on vegetable food, aided probably by confinement, and the gloomy and depressing passions inseparable from it, together with the low, damp, situation of the buildings. The prison contains about 850 convicts, chiefly young persons, not yet hardened in crime, and whom it may be possible to reform. Formerly the daily allowance to each was 20 ounces of bread; 3½ ounces of dressed meat; 1 pound of potatoes; 1 pint of broth; and 2 pints of gruel or porridge. This, however, was found expensive, and Mr. Copeland Hutchinson (the medical superintendent) was consulted upon what reduction this allowance could bear, with due regard to the health of the convicts. Mr. H. gave it as his opinion, that the bread and gruel should continue the same; the quantity of broth to be doubled, allowing six ounces of meat to the pint; no broth on Sundays but eight ounces of boiled meat without bone, and a pound of boiled potatoes. Mr. H. at the same time advised the committee to consult Dr. Wollaston, Sir G. Blane, Sir E. Home, Dr. Baillie, and Mr. Cline, on the subject. This did not satisfy the committee, and they established as the new system of reduced diet, 9lb. 3oz. of bread per week, or a double quantity of potatoes; 6½ pints gruel; 12¼ pints of broth, made with two ox-heads, for every 220 persons. Now allowing one ox-head to contain 9lbs. of animal food, making a daily allowance of 2 ozs. and two-thirds of undressed animal food to each couple, that is, they were allowed no animal food in substance. M. Magendie and Dr. W. Philip found that by feeding dogs wholly on the richest soups and most concentrated beef tea, that they could soon starve them to death; the Milbank Committee, though sanctioned, as they aver, by the " best medical opinion" (whose is not said) —soon found that sea-scurvy, under some of its worst forms, was the consequence. At present, there are about 200 cases of scurvy, scorbutic dysentery, diarrhœa, and hermeralopia; and since January, 27 have died of these complaints. The odium of the affair, in fact, began to spread, and Mr. C. Hutchinson, has been forced to defend himself from imputed concurrence in the measure, by an appeal to the public.—Such a detail is most lamentable, but it requires no comment.—*(M. C. Rev.)*

Diseases of Birmingham, from January 3d, to April 3d, 1823.

CHRONIC DISEASES.

	No.
Hydrocephalus	1
Cephalagia	12
Paralysis Partialis	2
Paraplegia	1
Hemiplegia	22
Mania	1
Hypochondriasis	2
Bronchocele	2
Asthma	140
Bronchitis C.	8
Phthisis	32
Hydrothorax	1
Tussis	20
Asthenia	6
Dyspepsia	113
Gastrodynia	7
Pyrosis	2
Hysteria	1
Marasmus	13
Obstipatio	29
Diarrhœa	7
Dysenteria	1
Limbrici	5
Tænia	1
Ascarides	5
Peritonitis C.	2
Splenitis C.	2
Hepatitis C.	1
Icterus	5
Ascites	5
Tumores Abdominis	2
Nephralgia	1
Dysuria	2
Gonorrhœa	2
Amenorrhœa	11
Hemorrhagia	9
Schirrus Vaginæ	2
Syphilis	4
Pseudosyphilis	3
Rheumatismus C.	37
Coxalgia	2
Lumbago	1
Struma	4
Impetigo	4
Porrigo Larvalis	2
Scabies	1
Strophulus	3
Abscessus	1

ACUTE DISEASES.

	No.
Phrenitis	1
Ophthalmia	1
Iritis	1
Synochus	24
Typhus	25
Scarlatina	3
Dentitio	6
Catarrhus	6
Cynanche Parotidæa	1
Cynanche Tonsillaris	4
Bronchitis A.	1
Pertussis	3
Pleuritis	4
Mastodynia	2
Pneumonia	1
Hæmoptysis	5
Hepatitis A.	1
Variola	7
Febris Infantum	6
Erysipelas	7
Rheumatismus A.	8
Febris Intermittens	6
Arthritis Rheumatica	
Phlegmasia Dolens	1
Abortus	1
Total	678

With the exception of a few days at the commencement, January was a cold, frosty month, the thermometer frequently 18 or 20 degrees below the freezing point of Fahrenheit. Snow fell upon the 8th, and remained till the 25th, with fresh falls every third or fourth day. At this time the weather became suddenly warmer, and a rapid thaw ensued, so that in two days the snow had entirely disappeared. February was very variable. The few first days of the month were fine, but this was quickly succeeded by frost, with alternate falls of rain and snow till the 20th. The wind during the greater part of the month blew from the north-west, occasionally veering to the east. The early part of March was marked by strong north-westerly winds, at times nearly blowing a hurricane. On the 9th, there was deep snow, which disappeared by the 12th, and, till the 19th, the weather was mild, though rainy. On the 19th, the wind changed suddenly to the east, and a deep snow fell in the night, succeeded by a continued and heavy rain through the whole of the next day. This seemed to have concluded the winter, which has been very long and severe. Vegetation is exceedingly late, and the hedges at present, April 10th, have scarcely exhibited a sign of unfolding their leaves.

As the severe season, which terminated the last quarter, brought in a large mass of winter diseases, as rheumatism, asthma, and other pulmonary complaints, so the same cause

continued to render them prevalent through the whole of January and a considerable part of February. The sudden change which took place on the 19th of the former month, though from cold to warm, was much more fatal to asthmatic patients than the previous extreme cold, and many who had borne the latter tolerably well, died suddenly on the return of milder weather; thus confirming the remark of Dr. Fothergill in the middle of the last century, that very quick transitions from one extreme to the other are highly injurious.

The instance of hydrothorax which proved fatal, and was examined, very strikingly evinced the accuracy of Dr. Darwin's description of this disease, when accompanied by occasional fits of convulsive breathing. The patient was never able to lie down, but very frequently the respiration was so difficult as to render it "very similar to the common periodic asthma. These exacerbations of difficult breathing were attended with cold extremities, cold breath, cold tongue, upright posture, with the mouth open, and a desire of cold air, and a quick, weak, and intermitting pulse." In one of these paroxysms he died. The only appearance of disease was great effusion into the chest, and partial effusion in the abdomen. The great blood-vessels were quite healthy, but the right cavities of the heart were empty, while the left were full and distended.

In one of the cases of hooping-cough, an opportunity was afforded of trying the application of leeches to the head, as recommended by Dr. Webster, and, so far as a single instance may be quoted, it was favourable to that gentleman's practice. There was considerable affection of the head, with drowsiness, and great unwillingness to be disturbed. The child hooped four or five times in the twenty-four hours. By the application of leeches and purgatives, every symptom disappeared in the course of a fortnight.

About the middle of February, diarrhœa was very common, and many patients who applied for relief on account of other diseases, were affected by it. It was not, however, usually severe. Catarrh, in a very aggravated form, has prevailed much in the town (though no severe case has occurred among the Dispensary patients,) and has ran so uniformly through whole families and districts, as to give a suspicion of its being propagated by contagion. The symptoms were strictly those of the common influenza, attacking, with great violence, either the head or the chest, and sometimes both, with sore throat. It is reported, in a few instances, to have been fatal. So far as I can learn, the worst cases have occurred among the higher classes.

From Paris' and Fonblanque's Med. Juris.

(Continued from page 380.)

Of Medical Evidence.—In civil cases, a witness will not be compelled to be sworn until his reasonable expenses are paid him. In cases of felony it is in the power of the Court to order that his reasonable expenses shall be paid to any witness attending on recognizance or subpœna, and no allowauce is made for trouble and loss of time, unless he shall appear to be in poor circumstances. On prosecutions for misdemeanors, and other cases not specially provided for by Act of Parliament, the Court is not authorized to order a compensation to witnesses for their attendance.

It has been supposed that medical practitioners are not bound to divulge the secrets of their patients, reposed in them in the course of professional confidence; but when the ends of public justice absolutely require the disclosure, there is no doubt that the medical witness is not only bound, but compellable to give evidence. In the celebrated trial of the Duchess of Kingston, this point of medical liability was raised by Mr. Cæsar Hawkins, and determined by

Lord Mansfield in the manner just stated. Vol. I. p. 160-1.

As to the manner in which a witness should deliver his evidence, the authors advise a middle course between garrulity on the one hand, and over-cautious reserve on the other; "he should," say they, "first answer patiently, distinctly, and tersely, the questions put by the counsel on both sides, the court, and the jury; and if none of these elicit the whole truth, any material point remaining to be disclosed, the presiding judge will always admit and gratefully receive the additions or explanations which may be necessary to the ends of justice. Notes taken upon the spot, or immediately after a transaction, may be used by the witness to refresh his memory; the notes should be original, not copies; if there be any point in them which the witness does not recollect, except that he finds it there, such point is not evidence, for the notes are only to assist recollection, not to convey information. No man is bound to give any evidence by which he may render himself liable to any criminal prosecution; as in the case of a surgeon, present in his professional capacity, at a duel which terminates fatally.

Physiological Elucidations of Questions connected with Marriage, Divorce, or Nullity.— Age, especially that of puberty:—The authors adopt the division of human life into seven periods, viz. infancy, from birth to the seventh year; second infancy, from the seventh to the fourteenth or fifteenth year in boys, and to the twelfth or thirteenth in girls; puberty, from those periods to about the twenty-first year; youth; manhood; old age; advanced age. The most important of these, from its relations to many moral and legal questions, is puberty; it is marked in the male by the developement of the organs of generation, of the larynx, and of the whole muscular system, and by a series of changes in the mental, not less remarkable than those of the bodily constitution. In the female, the evidences of the approach of this period consists in the enlargement of the breasts, in the appearance of the menstrual discharge, and in an increased size of the vocal organs, less evident than in the male. It is well known that this period in both sexes is by no means absolutely fixed, but relative and dependent on many unknown causes. It varies considerably, especially in the female, in different climates, and according to different habits of life. It is primarily dependent on the state of the organs of generation, and much influenced by their early or tardy developement, or by their removal. Of the former, we have instances in many well-authenticated cases of premature puberty, and of the latter, in the effects produced by early castration in men and animals. Hence it is evident that puberty, by which we mean the adolescence of mind as well as body, cannot be determined singly by the number of years, or by the condition of the body, but most correctly by the combination of both.

Impotence. — Impotence may be absolute or relative only to particular parties; it may also be functional or organic. Organic causes of impotence in males. The total want of the testicles is now admitted to be certainly productive of impotence. Their absence in the scrotum is, however, no proof of their non-existence; they may be retained within the abdomen, a circumstance which Mr. Hunter supposed to be connected with some imperfection in their structure; having descended into the scrotum they may have been extirpated, or have been absorbed by a natural process after certain diseases. The structure of these organs may be imperfect, a circumstance only to be detected by dissection. Such may be the case also with the vesiculæ seminales. The orifice of the penis may be unnaturally placed, and such a malformation has been considered a cause of impotence, but many cases

are recorded which appear to prove that emission with, or even without penetration, is sufficient to effect impregnation. Mutilations of the penis, not amounting to its removal, cannot be considered as necessarily causing impotence. In females, adhesion of the labia, of the vagina itself, tumours and polypi in it, arctitude, inversion, or prolapsus, and imperforation of the hymen, are among the principal organic causes of impotence. In both sexes this defect may depend on functional and moral causes, the operation of which it is difficult to explain.

In questions of *legitimacy* and suppositious children turn wholly on points of law, and can receive but little illustration from medical evidence. It is often important to determine whether a child born under particular circumstances lived after birth, as by the law of England, a man having living issue by his wife, who dies, is entitled to hold her land during his own life. In a case of this kind, tried in 1806, the medical witnesses differed as to what should be considered a proof of life. Drs. Babington and Haighton considered a twitching and tremulous motion of the lips as such a proof; Dr. Denman declared that the child was not born alive, and attempted to draw a distinction between uterine aud extra-uterine life, and considered that the tremulous motion of the lips might arise from some remains of the former. The law, however, draws no such distinction, and on the ground that convulsive motions could not occur in a body devoid of life, the jury found that the child was born alive. We think the former opinion correct.

(To be continued.)

MELANGE.

Dr. Von Autenrieth on Syphilitic Inflammation.

Cases often occur in which inflammation appears of an obstinate, tedious, and erysipelatous character, without symptoms of a syphilitic origin, though it may be readily confounded with syphilitic inflammation, particularly where the central ulcer is not sufficiently formed, or too deep in the throat to be discovered. In these cases Dr. Von Autenrieth never met with the following symptom, which, on the contrary, he never found wanting in any case where a common syphilitic ulcer, either large or small, superficial or deep-seated, existed in the throat. This characteristic symptom is a colourless watery froth, consisting of little vesicles found in large or small quantities at the hind part of the root of the tongue. Wherever he found this froth, he was sure to meet with a syphilitic ulcer if ever so hidden. A very close examination at the moment, when, on the root being pressed down, the patient involuntarily attempts to swallow, easily discovers whether the froth be present. By attending to this, the author was never deceived in his diagnosis. — *(Mag. Auslandischen Literature.)*

M. Guyon's Experiments on the Contagion of Yellow Fever.

The following experiments, performed last summer at Fort Royal, Martinique, are strong in support of the non-contagion of yellow fever. We must, of course, make allowance for idiosyncrasy, and something perhaps for the relation being very French-like. M. Guyon first took the shirt of a soldier who had the yellow fever, which was drenched with the perspirable matter of the patient, and having put it on instantly, continued to wear it for twenty-four hours. He was at the same time inoculated in both arms with the yellow matter from suppurated blisters. M. Guyon did not take the fever. He next took from a patient, who had died of yellow fever on the fifth day, his shirt, quite soaked with black sweat, and

still warm, and went immediately into the bed of the deceased, still soiled with excrement, &c.; here he remained six hours and a half, having both slept and sweated. M. Guyon did not take the fever. The soldier, whose shirt he had first put on, died, and his body being opened there was found a black sanguineous matter in the stomach, with which our experimenter had his arms inoculated, while the punctures were covered with portions of the deceased's stomach. This, in twenty-four hours, inflamed the parts, and affected the axillary glands, but still no fever. To crown the grand enterprise, M. Guyon drank about two ounces of the black vomit, while his arms were again inoculated, and rubbed with the matter, by M. Cuppé, surgeon of the marines. M. Guyon again escaped the fever. His experiments are said to have been performed before many witnesses; and the authenticity of the account is testified by M. Donzelot, Governor and Lieut. General.—*(Revue Medicale.)*

Dr. S. C. Lucæ on Cretaceous Depositions in the Heart and Arteries.

In six patients, all in the prime of life, and who had been exposed to hard labour and inclement weather, Dr. Lucæ observed symptoms characterising rheumatism of the heart, which ended in apoplexy and death. On dissection, he found concretions of a white, friable, and chalky nature, not unlike the sediment in the urine of gouty patients, disposed in large or small portions, between the valves of the heart and the large arteries, frequently in so great quantity as to intersect the fibrous texture, and interrupt its motions. The heart was also found enlarged, and water in the pleura and pericardium.--*(Saltzburger Zeitung.)*

M. Gardanne's Case of Syphilis communicated by the Lips.

A pupil of the College of Amiens, who had drank from a vase in the promenade, perceived some days after a slight ulcer on his lip, and soon after the tonsils and the velum were affected. He was treated "par les moyens adoucissans;" which only exaspérated the disease, and in eight months after when he came to Paris, he had all the dreadful marks of syphilis— the nose being flattened and perforated, the velum and tonsils totally destroyed, the arch of the palate exostosed, &c. An obturator of a particular form was fitted to the lacunæ, and he was put under a complete course of mercury. After the most minute scrutiny, no other source of infection could be ascertained.—*(Report of the Acad. Royale de Paris.)*

M. Etmuller, of Delitzoh—Case of Psoas Phthisis.

J. G. aged 59, a tanner, short, corpulent, and healthy, was suddenly seized with all the symptoms of enteritis, which was treated with the usual remedies without benefit. A consultation being held, it was determined to be cystitis, but little change was made in the treatment. He appeared dying, but was unexpectedly relieved by a copious fœtid stool, which left him very weak. Much greasy fœtid urine was also discharged. He was supported by salts, iceland moss, bark, &c. The lumbar region was sore on pressure, particularly when the bladder was full; and it was evident suppuration had ensued either in the kidney or the psoas muscle. He died in a state of great emaciation. On *dissection*, no morbid appearance could be discovered except the total destruction of the psoas muscle by suppuration, the abscess having broken, and been discharged by stool and by urine. It is singular that he never complained of pain in that side. Twenty years before, he had received a bruise there, by being thrown from a coach against the trunk of a tree.—*(Zeitschrift für physchiche Aertzte.)*

M. Bezard's Case of Dropsy.

A woman aged 28, fell into dropsy after being brutally kicked by her husband. In 13 years she was relieved 28 times by purgatives, and 665 times by tapping, giving, on a moderate calculation, about 1228 gallons of fluid. On *dissection*, the peritoneum was found cartilaginous and three lines thick; the omentum, mesentery, liver, spleen, pancreas, kidneys, and the bladder were converted into one scirrhous mass, placed toward the right side, and containing pus. All the food and drink which she took did not balance the weight of the fluid removed at each tapping. During the progress of the disease she had once typhus, twice pneumonia, and once dysentery, without interrupting the dropsy. This is one case among many to which Mr. John Hunter's well known doctrine of two diseases will not apply.—*(Göttinger Auzeigen für Medizin.)*

M. Otto's Case of Self-Castration.

The following case is interesting, in so far as it shews that the semen may be retained a long while in the vesiculæ seminales, without being either evacuated or absorbed. A middle aged man, in a fit of melancholy, having castrated himself with a razor, was cured, but died nine months after from another affection. On *dissection* the scrotum and both testicles were found to be cut away close to the pelvis, and a part of the preputium to be deficient. What was left of the vasa differentia, which were still hollow, showed little alteration; and the left seminal vesicle was small and almost empty, but the right one was of the natural size, and quite full of healthy semen.—*Hamburger Archiv für Medizinische Erfahrung.)*

M. Jules Cloquet's Case of Spinal Rheumatism.

M. Cloquet presented to the Royal Academy of Medicine the vertebral column of a man, aged 50, who had been subject to rheumatic pains in the course of the spine. All the vertebræ were found to be anchylosed not by ossification of the fibro-cartilages, but by a lengthened osseous encrustation of the periosteum which passed successively over the bodies of all the bones. It is very remarkable that this anchylosis was confined wholly to the right side and never crossed the median line, so that the left side was quite healthy, a circumstance which M. Cloquet had seen in other cases. In what way does the median line act as a barrier to the spreading of disease?—*(Report of the Academie Royale.)*

Dr. John Hume on Cotton Down applied to Scalds, &c.

I am not aware that it is generally known that cotton down has been used successfully as an application to burns and scalds. It is only a few days since I saw an instance of it, for the first time. A boy, seven years old, had several gallons of boiling water thrown over him, by which he was scalded from the back of his head down to the sacrum, and over the whole of his breast and right arm. In taking off his clothes, all the cuticle was separated from the skin, and the surface left raw. This was immediately bedded with cotton down, and the boy laid on his back in bed, where he lay in a state of insensibility for some days. Whenever matter began to appear through the cotton, it was removed by soaking it with warm water or hog's lard, and fresh cotton was applied. I saw him by chance seven weeks after the accident, when his arm and a great part of his body were healed; and wherever this had happened, the skin was of its natural colour and consistence, and had not the slightest appearance of having been ulcerated. How long this practice has been used here, I do not know. I thought it worth mentioning, as there used to be a prejudice against cotton as an

application to sores. — *Hamilton, 10th June, 1823.*

M. Harving of Manheim's New Treatment of Fistula Lachrymalis.

It appears, that M. Harving of Manheim, has adopted a novel, and to our English feelings, a very barbarous sort of treatment for fistula lachrymalis. An iron probe is brought to a white heat, and passed into the nasal canal so as to cauterise it in its whole extent, when there is placed in the interior a silver canula, which is allowed to remain till the cicatrization is completed. The canula is then withdrawn by a thread attached to its superior extremity, and the cure is completed. M. Harving is candid enough to confess that he has not hitherto had much experience of its efficacy, and we doubt much whether he will ever get patients to submit to have irons, at a white heat, thus thrust into their faces.—*(Hamburger Archiv.)*

M. Ritter on Bear's Grease applied to Specks on the Cornea.

The medicaments usually employed for specks on the cornea are intended to act mechanically upon them, and wear them down by friction. M. Ritter proposes to soften the speck, by continuing for a considerable time the application of a bit of bear's grease to it. In some cases, we doubt not, this or lard might be successful, and is worthy of a trial. M. Ritter, however, gives no cases in proof of its efficacy.—*(Graafe und Walther's Journal, Berlin.)*

M. Campana on the Extraction of Calculi by their largest Diameter.

It is possible, we think, to refine too much as well as too little on important operations, and the proposal of M. Campana seems to rank in the former class. After giving a minute arrangement of urinary calculi, according as they are spherical, flat, irregular, or oval, he proceeds to prove, that it is the most adviseable to seize a calculus on extracting it by the larger, and not by the smaller diameter. For though the dilatation must be greater by the whole thickness of the two blades of the forceps, yet the forceps is usually smoother than the stone, and, therefore, not so apt to produce dangerous laceration of the sphincter vesicæ. M. Campana may in some cases be right in these speculations, but it is not, we apprehend, always in the surgeon's power to choose his diameter of apprehension, and he must often take the one which most readily offers. In such an operation, it would be preposterous to spend time on trying to ascertain the diameter of stones.—*(Omodei Annali Universali, Milano.)*

M. Hildenbrand on the Russian Treatment of Hernia.

The following mode of replacing incarcerated hernia is employed by the Russian peasants. They take a vessel capable of containing a few pints, make a hole in its bottom, and stop it with a cork. The parts about the tumour are then rubbed with oil or soap, and the air in the vessel being rarefied with lighted tow, is placed over the parts like a cupping glass. The abdominal parietes are of course forcibly pulled into the vessel, while the tumour is drawn into the abdomen. The vessel is then removed by withdrawing the cork, and admitting the air. M. Hildenbrand has tried it repeatedly with great success, premising bloodletting, where inflammation is present. It cannot be used in pregnancy, dropsy, or much corpulence. The Russians, likewise, employ the same process in uterine hemorrhage, and spasm, which they refer to a wrong position of the uterus.—*(Svenska Läkare Salskapeto Handlingar.)*

M. Blaquiere on Sponge, as a Cataplasm.

When a sponge is charged with an emollient decoction, it acquires a softness and pliancy which renders it somewhat like a consistent mucilage; and besides, it applies itself with great accuracy to all the promi-

nencies and anfractuosities of a part. Evaporation is also easily prevented by a wrapper of wax-cloth, or a simple compress moistened with the same liquid, which may be renewed every five or six hours. It may be employed in all cases where emollient cataplasms are indicated, and where it is of importance to avoid weight. In fractures it is by far the best application; and in time of war, in sieges, &c., its readiness makes it invaluable.—*(Gazette de Santé Paris.)*

M. Paletta's Case of Glossocele.

A girl, aged 14, had had the frænum of the tongue cut soon after birth. After weaning, she acquired the habit of sucking her finger, and, perhaps in consequence of this, little excrescences and aphthæ appeared on the tongue, which in the end ulcerated. Her tongue, when she was brought to Paletta, hung out of the mouth upon the chin for two inches. The inferior incisors were entirely covered with a bed of calcareous matter, deposited from the copious saliva. This always disappeared in the fruit season, from her eating largely of fruits. M. Porati, on analysing it, found it to be composed of mucus and phosphate of lime; and M. Paletta hence infers, that the phosphate of lime is secreted in the salivary glands, and then introduced into the blood by the digestive passages. The method of treatment which he proposed was to push in the tongue, shut the jaws, and keep them in their place, by means of a bandage, and to gargle the mouth frequently with vinegar, an aluminous solution, or any other styptic. The result is not mentioned.—(Omodei, *Annali Universali, Milano.)*

M. Mayer's Treatment of Nasal Polypus.

The operation of extirpating a nasal polypus is not a very gracious one, nor always successful; and we therefore mention the following as doing away with its necessity, *si probatum sit.*

M. Mayer says that the *marum verum* of Linnæus powdered, and taken as snuff in the quantity of five pinches a day, is effective in removing polypus of the nose. The powder is very astringent, and produces evacuations of blood from time to time, and ends by destroying the polypus. M. Mayer gives the case of a man who had had a polypus of the nose from the age of fifteen, and which, in spite of repeated extirpations, continued to recur, though he had consulted all the best surgeons in Germany, France, and Italy. The powdered *marum* produced a complete cure, after being used as snuff for a short time. — *(Hufeland's Journ. Berlin.)*

M. Porta, of Rome, on Cold Water in Poisoning with Opium.

We can now settle the chronology of Mr. Wray's practice in cases of poisoning with opium; though we have not the slightest doubt that Mr. Wray was quite unacquainted with Porta's case, which must have occurred at least six or seven years ago, though it is not dated. We give the case verbatim:—"Porta of Rome relates the following most remarkable case of a poisoning with opium being counteracted with cold water. Peruvian bark being prescribed for a pregnant woman, labouring under hysterics, spasms, and faintings, to be taken internally in decoction, and the powder of it to be injected per anum, she received by mistake powdered opium instead of it, of which three ounces were taken in three days. The consequence was a costiveness, against which 22 glysters proved ineffectual, and a meteorismus threatened a speedy dissolution. This dreary event being already expected, one of the consulting physicians fell upon applying fomentations to the abdomen, cold like ice, and to inject glysters of a similar nature. The glyster being just injected, fæces smelling strongly of opium were discharged, and the patient recovered." —*(Continental Medical Repertory, March,* 1817, p. 150-1.)

Mr. Bruckmann's Case of the Regeneration of Mercury.—A woman, who had been under a course of mercury for syphilitic leucorrhœa, till she was slightly salivated, was about a year afterwards at a ball, and while dancing, she all at once felt an unpleasant sensation of coldness in the pit of the stomach. On coming home, and undressing herself, she found the skin of the chest and the chemise which was in contact with it, covered with black stains, and in the plaits of the chemise running globules of mercury. On applying the nail to the black stains in the skin small metallic globules were pressed from the pores.—*(Peters. Verm. Abhandlungen.)*

HOSPITAL REPORTS.

Guy's, July.

Sir A. Cooper, inspected a day or two ago, a man, aged 72, who died in this hospital from fracture of the neck of the thigh bone. After a careful and minute examination the fracture was discovered to pass through the large trochanter and neck of the bone. No union had commenced, although several days had transpired since the accident. The arteries were generally ossified. Upon seeing the extensive ecchymosis in the limb, Sir Astley remarked that, with such appearances, he had never seen fracture through the neck of the femur within the joint. The particulars of this case, no doubt, will appear in the appendix intended to accompany the third edition of the work on Fractures and Dislocations, which our readers will perceive by the notification given in this number of our Magazine, is already in the press, and will shortly be published.

In the press, the third edition of Sir Astley Cooper's work on DISLOCATIONS and FRACTURES OF THE JOINTS. An Appendix will contain a Refutation of almost every statement made in a late critical publication, on a subject treated of in the former editions of the above Work.

Also, in the press, a new edition of Dr. Denman's INTRODUCTION to the PRACTICE OF MIDWIFERY; to which will be prefixed, a Biographical Sketch of the Life of the Author, partly written by himself, and completed from the most authentic sources.

OBITUARY.

At Oxford, in his 81st year, JOHN GROSVENOR, Esq. Surgeon, and one of the proprietors of the Oxford Journal.

At Frampton, Mr. Edward Gardner, after a lingering illness. He was the schoolfellow and companion of Chatterton, and for more than 46 years possessed the confidence and friendship of our immortal countryman, Dr. Jenner.

In the 67th year of his age, the Abbé Agne Dennis Macquin, of Bermondsey Street, Southwark, formerly professor of Rhetoric in the College of Meaux en Brie.

Mrs. Margaret Terry, aged 90, for some time a resident of Canterbury, and relict of Mr. Terry, Surgeon, of Sittingbourne.

At the Hope Estate, Jamaica, Roger Hope Elliston, aged upwards of 140 years. He could not tell how long it was that he had ceased to work, but he knew it was a great many years. He had never drank rum, nor any other spirit, in the whole course of his life. He was a strong man, full six feet in height, and of great vigour and activity. He was baptized at his particular desire not many weeks before his death.

Mr. John Pope, of Lattimers, near Chesham. The deceased had been parish clerk of the hamlet upwards of 64 years, and he never failed daily to wind up the clock of the church for upwards of 43 years.

TO CORRESPONDENTS.

MARCUS *is received, and this is all we can say to him at present on the subject.*

Dr. B. is rather too severe; we will, nevertheless, accede to the proposal as far as regards the arrangement of his own concern.

We have not received the letter or paper alluded to by CRITO.

Whether PRINCE HOHENLOHE'S *miracles have ceased or only commenced, is a matter of perfect indifference to us;* "ANTI-MIRACULUS" *therefore may have his communication returned—we will never be the echo of any superstition, either in earnest or in jest.*

"TEMPUS FUGIT" *is in somewhat too great a hurry; if he will stop a little, we will endeavour to accommodate him as soon as possible.*

"AMICUS" *may have his book returned — had it come within our province we should, most assuredly, have noticed it before this.*

London:

Printed by E. JUSTINS, 41, *Brick Lane, Spitalfields.*

Published by COX and SON, St. Thomas's Street, and 39, High Street, Southwark. Sold also by Sherwood, Neely, and Jones, Paternoster Row; Simpkin and Marshall, Stationers' Court; John Cox, Berner's Street, Oxford Street; Callow and Wilson, Gerrard Street, Soho; W. Stewart, South Bridge Street, Edinburgh; Hodges and M'Arthur, Dublin; &c. &c.

THE WEEKLY

MEDICO-CHIRURGICAL & PHILOSOPHICAL MAGAZINE.

No. XXVI.] SATURDAY, AUGUST 2, 1823. [*Price* 4*d*.

" FLORIFERIS, UT APES, IN SALTIBUS OMNIA LIBANT
OMNIA NOS, ITIDEM, DEPASCIMUR AUREA DICTA."

BIOGRAPHICAL MEMOIR OF THE LATE JOHN HUNTER.

(Continued from page 2.)

THE design, however, ended, as is too often the case with unsuccessful industry, united with some talent and good intention. Whoever peruses the life of Burns, written by Dr. Currie, will see the progress of such characters pourtrayed in the liveliest colours. It was not the want of industry, nor the love of dissipation, that rendered our young farmer so soon dissatisfied with his occupation. —Burns, in contemplating the fields, and Buchanan at the sight of the bench, saw no prospect but unavailing toil. In company each found himself caressed. Let those who have greater encouragement to labour, and fewer incentives to dissipation, be careful how they condemn. In the metropolis, and still more in rising colonies, genius, with industry, may command success; but, with a population more confined, with constant competition beyond what the wants of a district can satisfy, some must be unsuccessful; and these will not always be the least meritorious.

It is easy to conceive that John soon became weary of witnessing embarrassments which he could not remedy; or that his sister preferred weeping in private, to admitting her younger brother a constant witness of her uneasiness. The event had, however, the good effect of weaning him from home, and probably of reconciling his mother to his absence.

Mr. HUNTER'S arrival in London at the anatomical school of his brother—his other studies—becomes a surgeon in the army, &c.

On his return to Long Calderwood, the village amusements had no longer any charms for such a mind. Probably, too, relations concerning the dissecting room, which he had heard from his brother James, five years before, might now recur to his expanding genius, and fill him with an anxiety to explore the arcana of nature.

In answer to a letter, in which he offered to assist his brother, Dr. William Hunter, he received a very kind invitation, and lost no time in repairing to London, in company with Mr. Hamilton, a friend of the family. This was in the month of September 1748, a fortnight previous to the commencement of the autumnal course. Dr. Hunter, in order to form a just estimate of his talents, gave him an arm, with the necessary directions, to dissect for the muscles. Those who have seen Mr. Hunter at work in any period of his life, will not be surprised to hear that he completed his task far beyond the expectations of his brother, who had been ten years engaged in the same occupation. He was immediately intrusted with an arm with the arteries injected. In this more delicate undertaking, in which the vessels were to be preserved as well as the muscles, he was equally successful; so that the doctor, who was all neatness and order, did not scruple to prophecy that he would one day become a "good anatomist," and would never want employment.

By these last expressions, which are transcribed from Sir Everard Home, we are led to conclude, that, however highly Dr. Hunter might

estimate the diligence and accuracy of his brother, he, at that time, had no conception of the strength of his genius, the boldness of his enquiries, or the minuteness with which he would conduct them.

We now come to consider Mr. Hunter as engaged in the dissecting room, under the direction of Mr. Symonds, Dr. Hunter's assistant. The advantages were certainly great to one so unacquainted with the subject, as, at that time, there was scarcely any other anatomical school in the metropolis.

In the following summer, the celebrated Chesselden, at the request of Dr. Hunter, permitted John to attend at Chelsea hospital. Here he had ample scope for his inquisitive mind —here he had leisure to trace the progress of nature in all her operations of disease and restoration— and here, in all probability, he first began to suspect that rude state of chirurgical pathology, which described the process of ulceration as a solution of the solid parts into pus or matter.

In the succeeding season, Mr. Hunter was so far advanced in the knowledge of anatomy as to preside over the pupils in the dissecting room, the doctor mostly confining himself to the lectures in the theatre. Such was John's employment during the winter. In the summer months, he resumed his occupation at Chelsea hospital; and in the following year, 1751, became a pupil at St. Bartholomew's. This was two years after the celebrated Mr. Pott was chosen one of the senior surgeons to that royal establishment. It would be curious to know what Mr. Hunter at that early period, thought of a character so different from himself. Mr. Pott was doubtless a great man, and an experienced surgeon, in his day, having, at that time, been five years an assistant surgeon. No man operated more gracefully, or, in lecturing, possessed a better choice of expression, an easier flow of language in conversation, or a nicer taste in composition. It was impossible, however, that Mr. Hunter should not, very early, have seen the irresistible foundation on which many of his master's pathological doctrines were supported. Yet, in none of his writings is Mr. Pott mentioned but with respect. Even the subsequent misunderstanding between him and Dr. Hunter produced no effect on John.

(*To be continued.*)

DR. GALL.

OF REASONING ALIENATIONS.

Reasoning alienations are those in which the individuals, although their mind be affected, are nevertheless actually reasonable, in whatever their malady is not concerned, and where, even under the relation of their mental affection, they act in the most consequent manner, and with a perfect knowledge of what they are about. A person whose intellectual faculties were generally in a sound state, imagined herself possessed with a demon; she nevertheless yielded to the solicitations of her father, who engaged her to consult me relative to her condition; she declared that she had only consented to do from filial obedence, and told me with a smiling air of assurance, that it was useless to give myself so much trouble about questioning her carefully; that her malady was not natural, since so many celebrated physicians who had promised to relieve her had not been able to succeed. As she answered very pertinently to every thing that was said to her, I endeavoured, by every kind of argument, to make her change her opinion. But she still persisted in her manner of answering, and with as much precision as if her condition had not been imaginary. She absolutely expected nothing from the assistance of men, and solely had recourse to prayer.

In these *reasoning alienations*, it is equally possible that propensities

may become noxious from a too well marked energy. Insane persons of this description answer questions with justness and precision; no disorder in their ideas is observed; they employ themselves in reading and writing, and converse as if their moral and intellectual faculties were perfectly sound. They nevertheless, during these intervals, tear their clothes and bed-coverings, and have fixed desires and ideas. Although these sort of insane persons act as if they were of sound mind, and are, in every other respect, reasonable, they are no less insane relatively to an illegal action. Different examples will place this proposition beyond a doubt.

At Berlin, Mr. Mayer, a surgeon in the army, shewed us, in the presence of Messieurs Heim, Formey, Hufeland, Gœrgue, and others, a soldier whose grief for the loss of his wife, whom he tenderly loved, had considerably weakened his body, and occasioned excessive irritability; which ended by his having a violent convulsive fit every month. He was sensible of their coming on; and as he gradually felt an immoderate propensity to kill, in proportion as the fit was ready to come on, he at that time earnestly entreated that he might be put in irons. At the end of several days, the fit and the fatal propensity diminished, and he himself fixed the time when he should be set at liberty again.

At Haina, we saw a man who, at certain periods, felt an irresistible desire to ill-treat people. He was aware of this unfortunate propensity, and caused himself to be chained until he was satisfied that he might safely be set at liberty. A man of a melancholy habit of body assisted at the execution of a criminal. This spectacle produced in him such a violent emotion that he was immediately seized with the most vehement desire to kill, yet, at the same time, he preserved the most acute apprehension of committing the crime. He depicted his deplorable condition by bitterly weeping and with extreme confusion of ideas. He struck his head — wrung his hands — remonstrated with himself, and called out to his friends to keep themselves out of his way. He thanked them for the resistance they opposed to him.

M. Pinel has also observed that, in furious insane persons, there is frequently no derangement of the intellectual faculties. This is the reason why he also declares against the definition which Locke has given to mental alienation. He speaks of an individual whose mania was periodical, and whose paroxysms were regularly renewed after intervals of calm for several months. "Their approach was announced, says he, by a sense of burning heat in the abdomen, then in the chest, and lastly on the face; redness of the cheeks—fierce look—strong distension of the veins and arteries of the head; then followed infuriate madness which led him with an irresistible propensity to lay hold of some instrument or offensive weapon to knock down the first that came before him—a kind of internal combat which, he said, he incessantly experienced between the ferocious impulsion of a destructive instinct, and the deep horror with which the idea of a crime inspired him. No symptoms of wandering with respect to memory, imagination, or judgment. He confessed to me, during his strict solitary confinement, that his propensity to commit a murder was absolutely forced and involuntary; that his wife, notwithstanding his affection for her, had nearly become a victim to it, and that he had just time enough to warn her of the danger by telling her to keep out of his way. All his lucid intervals brought forth the same melancholy reflexions, the same expressions of regret; and such was the disgust that he had conceived for life, that he had several times sought, by

a last attempt, to bring it to a conclusion. What right have I, said he, to kill the superintendant of the hospital who treats us with so much humanity? yet, in my furious moments my whole aim is to pounce upon him, as upon others, and to plunge a stiletto into his heart. It is this unfortunate and irresistible propensity which reduces me to despair, and which has attempted me to lay violent hands on myself.*

Another insane person laboured under violent fits, which were in the habit of being periodically renewed during six months of the year. The patient himself felt the decline of the symptoms towards the end of the paroxysm, and the precise time, when, without risk, his liberty, in the interior of the hospital, might be restored to him. He requested himself that his deliverance might be delayed, should he not feel capable of governing the blind impulsion which led him to acts of the greatest violence. He acknowledged, in his intervals of calm, that, during the paroxysms it was impossible for him to repress his fury; and that, if any one at that time came before him, he felt, by thinking that he saw the blood running in the veins of the person, an irresistible desire to suck it, and of tearing their limbs to pieces with his teeth in order to render suction more easy.

These examples, it is seen, refer entirely to what I have said of reasoning insanity—of the excitation and manifestation of evil propensities and partial alienations.

In reasoning alienation, the patients are acquainted with their condition, and judge precisely of the disorder which reigns in their sensations, propensities, and ideas; they feel the same remorse immediately after the injurious action. "A young insane person," says M. Pinel,† "experienced one morning, as if in a fit, a maniacal delirium, which led her to tear and destroy every thing that came in her way, and to commit acts of violence upon every one that went near her, to such a degree, that they were obliged to put her in the straight jacket. This means of repressing her fury, immediately calmed her; but she recollected with sorrow the violence of her passion, for which she evinced the greatest contrition, and thought she had deserved the most severe punishment.

In one kind of periodical insanity where those who labour under it are irresistibly carried away with the idea of murder, M. Pinel remarks, as diagnostic signs, that they are conscious of the atrocity of their actions, that they answer correctly to questions put to them, and manifest no derangement neither in their ideas nor in their imagination. Therefore, an important manner of acting, giving just answers, and the consecutive discourse, either during the lucid intervals, or at the moment of an illegal action, are not sufficient to prove the total absence of mental alienation.

The most embarrassing cases are those wherein the alienation is manifested without the usual symptoms accompanying it;—such as convulsions, heat, thirst, redness, fury, &c. for then the faculties of the mind by no means appear deranged. A young man having received a considerable wound in the neighbourhood of the temporal bone, was trephined by Acrell. When the wound was cured, he could not keep from stealing, although previously he was never known to have any such a propensity. Acrell discovered that it was solely to be attributed to lesion of the head, and caused the unfortunate young man to be set at liberty. This phenomenon is not unfrequent during pregnancy. We are acquainted with four examples of women who, in their ordinary state, had not the least

* L. c., p. 102.
† L c., p. 88.

inclination to theft, but who, during pregnancy, were provoked to it by a violent propensity.

It is known that women subject to leucorrhœa, and those who are pregnant, experience singular longings. Now, when they have a vitiated appetitite, for eating charcoal, chalk, and even dirt—when a virtuous woman, during gestation, cannot endure the sight of a cherished husband without feeling paroxysms of lubricity, why should it be improbable that irresistible propensities to illegal actions may be equally awakened during these moments? Pochaska* relates, on the authority of Schenk, that a pregnant woman, on seeing the naked arm of a baker, was seized with the irresistible desire of biting a piece out of it. She compelled her husband to induce the baker, for a sum of money, to suffer her at least to bite his arm. Another pregnant woman satisfied her horrible longing by killing her husband and eating him; she salted his body, that she might live upon it for several months.

As the nature of reasoning insanity is not generally sufficiently known, it happens that malefactors who belong to this class, and who are seen to act and to reason in a consequent manner, are, in certain countries, condemned to imprisonment or death, whilst, in other countries, they only send them to madhouses.

(To be continued.)

POISONING BY OXACLIC ACID.

(Continued from p. 378.)

The next experiment shows the action of the poison, when introduced at once into the veins.

Experiment 10.—Eight grains and half of acid were dissolved in 15 drachms of water at 100°, and three drachms slowly injected, every five minutes, into the right femoral vein of a dog weighing about 20 pounds, —the inferior division of the vessel having been previously tied.

After the two first injections, the animal trembled, and the breathing became somewhat fuller; after the third, the breathing was slightly convulsive, but soon became again natural; thirty seconds after the fifth, he made a few sudden deep inspirations for half a minute, then some unavailing efforts to inspire, and he died without a struggle. The heart did not pulsate after the last inspiration. [During a repetition of this experiment, the pulsations of the heart were observed to become suddenly very feeble after each injection.] The body was then opened immediately. The right cavities of the heart were distended, and not contractile. The blood in those cavities was dark, and had begun to coagulate; that in the left side was florid, fluid, and soon coagulated in the usual way. The blood in both these cavities did not redden litmus; and the serum, which had separated next day from that in the right side, gave no precipitate with hydrochlorate of lime. [Neither did that of the vena cava in another dog killed in the same manner.] The muscles preserved their contractility.

The two next experiments show the action of the poison introduced into the intestines, and the effect of applying it to a part, of which all connexion with the body has been destroyed, except by blood-vessels.

Experiment 11.—In a puppy about 8 or 10 pounds weight, an ounce of water, containing 45 grains of acid, and at the temperature of 100°, was injected into a loop of small intestines two feet long. A single ligature was applied strongly at one end, and a double one at that by which the syringe was introduced.

19′. An attack of vomiting, preceded for some minutes by deep breathing, which afterwards became easier.

---

* Opera minora, t. 11. p. 98.

40′. Breathing small and frequent, — occasionally fuller, and somewhat convulsive; dulness.

1h. 18′ Breathing occasionally interrupted by a slight sudden expiration, like a short cough. Hindlegs stiff. He hangs the head, and remains in the same posture.

1h. 45′. The breathing is quicker. The catches in expiration now occur together in paroxysms, and cause agony. Hindlegs very rigid. Two slight extensions of the head and tail; posture very peculiar. (See Experiment 3d.)

1h 55′. There are now distinct spasmodic paroxysms. First, the breathing becomes convulsive, and deeper and deeper; at last, the chest is so firmly fixed, that with great effort he expands and contracts it only to a very small extent. Then the spasms relax, with gurgling cries and slight barking, and he soon breathes freely, but hurridly. The legs are quite insensible.

2h. At the height of the paroxysm, the breathing is wholly suspended.

2h. 35′. The paroxysms have become milder; he cannot stand when raised.

3h. Paroxysms less distinct, but longer, and accompanied with slight reversion of the head and tail. Breathing in the intervals short; the eyes alone are sensible.

3½. He is now in a state of almost pure coma, spasmodic paroxysms.

6h. Breathing slower and uniform, and expiration accompanied with a bark. Slight opisthotonos produced by touching his back smartly; but he has no other sign of sensation.

9h. Barking very feeble; no other change.

16h. Found dead and rigid.

The body was examined 8 hours afterwards. The blood was equally dark in both systems. The intestines were perfectly natural, internally as well as externally. The ligatures were firm; most of the injected fluid gone. The fluid of the thoracic duct does not redden litmus.

Experiment 12.—The last experiment was repeated on a puppy of the same size. But before the poison was injected, a double ligature was tied at each end of the portion of the intestine, the gut divided betwixt them; and all its connections, by means of the mesentery, were then dissected away with great care, except four arteries and veins; the knife being carried round close to each vessel.

10′. Some stiffness of the hindlegs. Begins to hang the head and look dull.

26′. An attack of vomiting preceded, as in the last case, by deep respiration.

33′. The head and tail were twice extended slightly; breathing at times convulsive in expiration. Much duller.

1h. 7′. He is affected with a peculiar kind of dulness of sensation, or somnolency; will not rise; yet when raised, can both walk and stand. Expiration still convulsive.

1h. 30′. He is affected with paroxysms of suspended respiration, precisely as the other was in 1h. 55′.

2h. 5′. The paroxysms are now very distinctly marked, and are accompanied with more general tetanus than in the last animal. The insensibility has already become almost complete.

2h. 40′. The paroxysms of spasm have gradually and almost entirely subsided, and he now lies in a state of pure coma.

5h. 10′. He was found dead, warm, and stiff. The body was opened 17 hours afterwards. The ligatures were firm, and most of the injected fluid was gone. The mucous coat of the insulated portion of intestine was somewhat softened, but not discoloured. There was no vascularity in any part of the intestines. The blood was black in both systems of vessels. The lungs were of a scarlet colour on many parts of their anterior surface.

Experiment 13.—This experiment shows the action of the poison when introduced into the sac of the peritoneum.

Twenty-two grains dissolved in four ounces of water were injected into the peritoneal sac of a strong cat, through an incision in the upper and lateral part of the abdomen; and the aperture was immediately secured with great care by stitches. Little pain seemed to follow the injection. The animal in a short while, however, began to be very restless and uneasy, and tried to vomit.

10′. It looked very dull, and twice jerked its head backwards.

11′. The heart beat feebly. It stretched out the paws, and yawned; the tail became stiff; and the eyes nearly insensible.

12′. He now had general stiffness of the whole trunk and extremities, and made fruitless efforts to inspire.

13′. These were suddenly succeeded by relaxation of the whole body, and then by a few convulsive gasps and twitches of the lumbar muscles.

14′. The heart continued to tremble.

The body was examined 24 hours after death. The sac of the peritoneum contained scarcely a drachm of fluid, which reddened litmus. [In the case of another dog, 12 pounds in weight, that survived above 9 hours, when 17 grains were injected into the peritoneum, we found nearly as much fluid as was introduced; but by analysis, it was found to contain no acid, and to be in fact pure limpid serum; the peritoneum was also very vascular.] The peritoneum had a faint greyish-brown colour. The blood of the mesaraic veins does not affect litmus. The stomach and intestines are natural internally. There are some irregular scarlet patches on the surface of the lungs.

The two next experiments show the effects of the neutral oxalates of potass and of ammonia.

Experiment 14.—Thirty grains of oxalic acid dissolved in 24 parts of water and exactly saturated by subcarbonate of potass, were injected into the stomach of a young rabbit.

8′. The breathing begins to be increased in frequency.

13′. Great feebleness of the limbs, so that they may be placed in almost any posture; occasional slight extension of the hind-legs.

15. Opisthotonos brought on by touching him, and then frequently repeated; breathing slow, laborious, and inspiration very difficult; he becomes insensible.

17′. Breathing has gradually become shorter and shorter, and has now ceased. The body was opened immediately. The heart was not contractile. The blood was still fluid; and more florid in the aortal than in the pulmonary cavities, yet darker than natural. The stomach was natural externally; internally it had a uniform, light cherry-red blush, not referable to vessels.

Experiment 15.—A drachm and a half of the oxalate of ammonia (ascertained to be neutral) was dissolved in eleven parts of tepid water, and injected into the stomach of a strong cat. In 5½ minutes the breathing became very hurried, and soon afterwards it was attacked with occasional opisthotonos and convulsions. In a few minutes more it became insensible; the pulsations of the heart could not be felt, and death was complete nine minutes after the injection.

The body was opened without a moment's delay. The blood in the aortal side of the heart was more florid than in the pulmonary, but less so than during life: it was fluid, and soon coagulated naturally. The stomach internally and externally was perfectly natural.

(*To be continued.*)

From Paris' and Fonblanque's Med. Juris.

(Continued from page 11.)

Conception and Utero-Gestation.—The signs of conception, especially

when not taken collectively, are now admitted to be very uncertain, and at most, to afford ground for probable suspicion. "History informs us," says Capuron, "that pregnant women have been brought to the scaffold, after an examination by medical men and matrons, who have declared the absence of pregnancy." Fortunately, however, the progress of time never fails to remove our doubts. The uncertainty of the signs of the existence of pregnancy is greatest in the early periods, and becomes less as it advances; but under any circumstances the practitioner will best preserve his honour and reputation who speaks with caution and hesitation. Many subordinate questions are connected with the consideration of parturition in a medico-legal view.

1. It cannot be doubted, that from the operation of certain causes, as diseases, narcotics, injuries of the head, a woman may be delivered in a state of insensibility, and remain unconscious of the event.

2. It is impossible to say positively how far the period of utero-gestation may be shortened, to be compatible with the future living of the offspring. As a general rule, the capability in an infant of living increases in the direct ratio of its maturity.

3. There are very few positive facts which tend to prove whether, and to what extent, the natural term of utero-gestation can be extended. The variety of opinions entertained on this point by legislators and medical writers, sufficiently prove the absence of any adequate grounds for forming any conclusion; 280 days is the period ordinarily allotted to this process; but in the imperfect state of our physiological information, there is probably both justice and mercy in allowing of a moderate extension. The civil code of France decrees 300 days to be the most distant period at which the legitimacy of a birth shall be allowed, a law which the authors consider as leaning to the side of mercy, rather than strict justice. The practice of our own courts of justice seems, however, to allow an equal licence in this respect, whilst their decisions are guided by the nature of the attendant circumstances in particular cases.

4. The value of the signs which establish the fact of a recent delivery depends altogether on their combination; collectively taken, they hardly admit of a doubt, whilst a reliance on any of them individually will almost infallibly lead into error. Much also depends on the period at which an examination is instituted after the occurrence of the supposed parturition. The authors limit the period at which the results of such an inquiry can be received as unexceptionable evidence to ten or twelve days.

5. There are certain diseases which may produce effects that bear a more or less close resemblance to the consequences of parturition, and that we think in a greater degree than the authors appear willing to admit. At the same time, there can be no doubt that in a great majority of cases the discrimination is not difficult.

6. We possess no adequate means of determining whether a woman has ever borne a child, at a period remote from that of examination.

7. The earliest and latest periods at which women are capable of bearing children are subject to considerable variety. Like other epochs in human life, they are relative, not absolute; the appearance of the menstrual flux and its cessation are the most natural standards. If we were to pay much attention to the miraculous cases recorded of parturition in very early and very advanced age, we should be led into many errors.

We pass over some remaining questions, which appear to be purely

practical or physiological; as the possible number of chidren at a birth; super-fœtation; abortion; premature labour; the Cæsarian operation, &c.

Hermaphrodites.—It is now generally admitted that the recurrence of true hermaphrodites in the higher classes of animals is a mere creation of imagination. All the instances in which a double sex has appeared to exist in the same animal may be referred to malformation of various kinds, which Sir E. Home has divided into four classes: 1. Malformations of the male: 2. Malformations of the female: 3. Males with such a deficiency in their organs, that they have not the character and properties of the male: 4. A mixture of the organs of both sexes, although not sufficiently complete to constitute double organs.

Idiots and Lunatics.—The laws of this country draw a distinction between idiocy, madness, and lunacy; idiocy being *dementia naturalis vel ex nativitate*, depending on defective organization; whereas madness and lunacy are *dementia accidentalis*, the former continual, the latter intermittent, whence its name from the supposed lunar influence.

"Among the legal disabilities," say the authors, "under which persons *non compos* labour, one of the most material to the medical adviser is connected with the disposal of property by will, and it is most peculiarly his duty to observe, whether the testator is or is not of sound mind, memory, and understanding, at the time of making his will; for it can scarcely be necessary to observe that many, who during the greater part of their lives have been of sound mind, gradually lose their faculties towards its close, and become liable to the impositions, restraints, and even cruelty of those about them. In such cases the medical attendant alone obtains access—it is to him, therefore, that the law will look for the detection, exposure, and defeat of frauds. An idiot cannot make a will, but a lunatic may during a lucid interval; and subsequent lunacy does not operate as a revocation.

Lunatic Asylums.—Although by the operation of the acts of the legislature, gross abuses are now of comparatively rare occurrence in these establishments, yet even at the present day instances occasionally present themselves, fully evincing the necessity of a constant and vigilant superintendence. The authors object to the proposed alteration in this particular, of transferring this task to a permanent officer, instead of the Commissioners appointed by the College of Physicians, as being more open to abuses.

In a medico-legal point of view, the questions which the practitioner may be required to answer on the subject of insanity are four.

1. As to the existence and proofs of insanity. It is in doubtful cases only that these questions present any difficulty, and in them a decision can be formed only by patient and attentive observation. In a disease which varies so much in its characters, it is quite impossible to propose any signs or proofs that shall be absolutely conclusive; they are relative to particular cases, and depend in no small degree on the tact and skill we employ in observing and examining.

2. Whether the symptoms are such as to require restraint of person or property. Here the authors observe, that coercion should never be employed but as a protecting restraint to guard the patient from doing mischief to himself, or offering violence to others.

3. Whether there has been any lucid interval and its duration. By the term lucid interval, we are not to understand a remission of the disease, but a total suspension of it—a complete, though temporary restoration of reason. In answering this question, we must be regulated by

the same principles as in deciding on the existence of insanity.

4. Whether there is a probable chance of recovery, and whether it be likely to be permament? The prognosis in this, as in other cases, must be guided by the circumstances; as the modification of the disease; violence, frequency, and duration; causes, whether moral or physical; age, sex, habit of body, and absence or presence of hereditary pre-disposition.

Impositions.—We proceed to the consideration of this subject, passing over nuisances, which afford matter for legal, rather than medical investigation.—Of feigned diseases. The objects proposed to be effected by deceptions of this nature are very various, and frequently very far from competent to recompence even physically those who have put them in practice. In general, a medical practitioner, well acquainted with symptoms, will find little difficulty in detecting the imperfection and inconsistency of the deception, though occasionally the task is more arduous, either from the nature of the assumed disease, or the consummate skill and address employed in carrying on the fraud. One precaution suggested by the authors should never be omitted; namely, that whenever the suspicions of a medical man are excited with respect to the sincerity of a patient's account, he should always endeavour to conceal them; for while the impostor is persuaded that the medical attendant is his dupe, he will be less on his guard; he should be questioned as to the origin, progress, and duration of the disease, its seat, intensity, and the effects produced upon it by remedies. Few impostors will be able to withstand such interrogatories without tripping; they will soon betray some incongruity in their statements, and enable the pathologist to elicit the truth. Vol. I. p. 356. For many extraordinary instances, we refer to the works of M. M. Foderé and Mahon, Mr. Hennen, and Transactions of the College of Physicians. Dublin. Vol. II.

(To be continued.)

MELANGE.

Dr. Hufeland on Antimonials in Inflammation.

Before coming to his subject, M. Hufeland steps out of his way to attack our English practice in the exhibition of calomel, and we certainly think with a great deal of justice. We have heard Mr. Abernethy in his lectures say, that he would undertake to derange the health of a robust man by a simple dose of calomel, and yet we see it every day given to infants almost indiscriminately. From the time of Basil Valentine, who wrote the Triumphant Chariot of Antimony, it was used as the principal remedy in acute fevers. In the last century, Huxham founded his treatment of inflammatory diseases of the chest on his antimonial wine; and now Balfour, Hufeland, and others, seem to take credit for the discovery, or at least for the continuance of the remedy. Hufeland says, that under the form of tartar emetic, joined with nitre, ammonia, or simple oxymel, it will, "with certainty," cure all inflammatory diseases of the chest! This is certainly too much, even for the editor of the Berlin Gazette of Health, or Magazine of Medical Wonders, as we may well call it. He is not pleased, however, with the plan followed by M. Peschier, of Geneva (*See Quart. Jour.* IV. p. 116.) who substitutes it for blood-letting and blistering. M. Hufeland, on the contrary, always commences with the abstractions of blood, general or local, according to the case, and does not, like M. Peschier, prescribe empirically, in all cases, from six to fifteen grains in six ounces of some vehicle.—*(Journal der praktischen Heilkunde.)*

M. Pommer on Antimonial Friction in Intermittents.

During the winter of 1815, M. Pommer had occasion to treat several cases of intermittent in the army of Wurtemburg, cantoned on the Loire and Allier, in which the bark was unsuccessful. As the fever often terminated by the breaking out of pustular eruptions, he thought it would be well to try the tartar emetic ointment, prescribed by Autenrieth in hooping cough. The first case was a soldier with a quartain, who had about the size of a nut of the ointment rubbed in on the abdomen. The fever preserved its type till the pustules appeared, when the fit was retarded an hour, and went off an hour sooner. It became gradually less frequent and less severe. Three weeks after their appearance, and after two ounces and a half of the ointment had been used, the fever was entirely subdued. He remained in the hospital another month, and had no relapse. M. Pommer treated in the same way, with equal success, tertians, double tertians, quotidians, and fevers complicated with nervous affections. The dose was never more than one or two ounces. The pustules usually appeared from the second to the sixth day.—*(Leipzig Zeitschrift für Aertzte.)*

M. Fontaneilles on large doses of Tartar Emetic in Jaundice.

Adélaide, aged 23, had suppressed catamenia in consequence of chagrin, and in two days after symptoms of jaundice appeared, with shivering and severe abdominal pain increased on pressure, burning thirst, cephalalgia: tongue natural. Twelve leeches were applied inside the thighs which bled well. Next day two grains of tartar emetic were given in two pints of a bitter decoction, and at night she vomited a yellow, oily, and very bitter matter, with great relief of all the symptoms: had two grains more of the emetic. The day following, eing still better, four grains more of the emetic were given. And in the evening four ounces more, and an enema with two ounces of sea salt. Next day, little change being observable, four grains of the emetic were again given; but in the evening she was much better, and had only two grains of the emetic. The next day, still improving, two grains of emetic were given. In eight days the patient was quite recovered, after having taken 24 grains of the medicine in four days. The catamenia returned, and her colour became natural, though authors mention that it takes a month to restore the natural colour. It is to be remarked that the effect of the medicine was precisely according to the account of Rasori. The first two grains produced vomiting; but though the dose was doubled and tripled, she had no vomiting until the disease was yielding, when she could not support two grains. M. Fontaneilles adds, that he has successfully used the tartar emetic as a lotion in erysipelas, phlegmon, ophthalmia, &c. in the proportion of ten to twenty grains to a pint of mucilaginous tepid water.—*(Revue Medicale.)*

M. Richter of Moscow's Case of Pregnancy, with Prolapsus Uteri.

A woman, who had long laboured under a complete prolapsus uteri, it hanging down between the thighs, except when she lay in a recumbent position—became pregnant. The pendent uterus was observed to enlarge with the growth of the fœtus, but when she was gone about half her time, it retracted itself, and ascended upwards into the pelvis, so that about the seventh month not a vestige of the prolapsus was visible. On delivery, M. Richter found the orifice of the womb towards the left; the head entered the pelvis obliquely, and forcibly drove forth the left and anterior part of the lower segment, obstructing the passage of the urine. He made her assume a lateral posture in order to obviate the oblique posi-

tion of the uterus, and drew off the urine by a catheter, keeping back, during each pain, the parts which had been forced down. In this manner, he succeeded in effecting delivery. The prolapsus again appeared as soon as the patient was able to be out of bed.—*(Pet. Ver. Adhand.)*

M. Lavagna on Ammonia as an Emenagogue.

Since the time of Astruc, who asserted the rare success of emenagogues, it has been considered almost hopeless to try the medicines of this class, formerly in repute. M. Lavagna has endeavoured to revive the reputation of emenagogues by proposing the injection of ammonia into the vagina. He gives 14 cases of amenorrhœa, in which this succeeded, sometimes in 24 hours, and at most in five or six days, not only to produce the discharge, but to remove the paleness, the oppression, the difficulty of breathing, the anorexia, the weakness, &c. The same success was experienced in all sorts of temperaments, plethoric, bilious, pituitous, and their complications. The proportion employed was ten or twelve drops of alkali, in two spoonfuls of warm milk, often repeated in the course of the day. It generally produced in the vagina a sensation more or less painful, according to the strength of the mixture and the sensibility of the part; but in no case was any thing dangerous or troublesome produced.—*(Bib. Ital.)*

Dr. Hintze of Waldenburg's Case of Mammary Menstruation.

A young widow, mother of two children, one aged six, the other ten, of delicate constitution, of an ingenious mind, of strict moral character, and always regular in menstruation, caught cold while unwell, which stopt the discharge without any other troublesome symptom for the time. The next time the menses flowed from the nipples in the usual quantity, but without any other derangement of health; and for several years, in spite of all that could be done by emenagogues, the same phenomenon continued. It is said to have been cured by the Altwasser waters.—*(Rust's Mag. der Heilkunde.)*

M. Bigeschi on Ergot of Rye in Parturition.

This author reports favourably of the ergot of rye, in promoting the contractions of the uterus, when administered in doses of 25 or 30 gr. A smaller dose he says only fatigues the uterus. M. Bigeschi limits its exhibition, of course, to cases of natural labour and favourable presentations. We do not perceive that he makes sufficient distinction when it ought and ought not to be given; but he has established, contrary to the experience of M. Legonais of the Hospice de la Maternité, that it is sometimes useful, and that it is not followed by any troublesome sequelæ. —*(Jour. Gén. de Méd.)*

Drs. Schneider and Henkelbein on Ergot of Rye.

When delivery was retarded by insufficiency of the pains, in uterine hemorrhage and retention of the placenta, the secale cornutum was found to be a medicine of considerable power. The mode in which it was used, was to put a drachm finely powdered into a quantity of water (how much is not said) in a vial hermetically closed, and boil it down to four ounces. This seems to be an impossible process. The taste of it is said to be insipid, and the colour peach-like. The four ounces are divided into three doses, and given every 12 minutes.—*(Rust's Mag. der Heilk.)*

M. Roagna's Singular Case of a Fallopian Conception.

A healthy Spanish woman became pregnant for the third time, and had all the common symptoms without any unusual feelings. At length she was seized with pains, which were believed to be those of parturition, but ended by an evacuation from the uterus of a fluid tinged with some blood. She afterwards had milk fe-

ver, and her breasts filled with milk. After this period she menstruated regularly for six months, when the catamenia ceased without any assignable cause, and was succeeded by a discharge somewhat resembling that of leucorrhœa, with diarrhœa, tenesmus, and acute pain in the uterine tumour and region of the sacrum. In the beginning of the second year she was seized with continued fever, the pains in the sacrum being still more severe. What is most remarkable is, that at this time she voided by the rectum several amorphous bones, without cartilage or covering. On carefully examining the parts, M. Roagna discovered that twenty-one lines from the arms, the rectum was perforated for about six lines, and that the bones had made their way from the left fallopian tube through the perforation. Several bones were voided, up to the third year after conception.—*(Dec. Med. Quir. & Rev. Med.)*

Butter.

M. Chevreul has lately subjected the butter of cows' milk to examination. He finds that 100 parts of fresh butter consist of

Pure Butter	83,75
Butter Milk	16,25

From numerous experiments, M. Chevreul concludes that there exist in the oil of butter at least two fluid substances, one of which is soluble in all proportions in cold alcohol, does not possess acrid properties, and gives by saponification some sweet principle, butiric, caproic, capric, margaric, and oleic acids. M. Chevreul has given this oil the name of buterin, because it contains the butiric acid (or its elements,) to which butter owes its odour. The other fluid substance has the properties of olein.—*(Ann. de Chimie et de Physique.)*

Carbonate of Magnesia in the Urinary Calculi of Herbivorous Animals.

M. Lassaigne remarks, that but few of those chemists who have examined the urinary calculi of herbivorous animals have mentioned carbonate of magnesia as one of their constituents; but MM. Wurser, John, and Stromeyer, have discovered its existence; the two first in the urinary calculus of the horse, and the last on a calculus taken from a cow.

The results of M. Chevreul's analysis of the urine of the horse, which he found to contain carbonate of magnesia, induced M. Lassaigne to examine the urinary concretions of the same animal; in which he readily discovered it, as well as in those of the ox and the cow. By treating these calculi with sulphuric acid, sulphate of lime was principally formed, but by subsequent operations magnesia was procured. The quantity of carbonate of magnesia is small, forming only the 150th to the 200th of the weight of the calculus.—*(Ann. de Chimie et de Physique.)*

Preparation of Iodide of Potassium.

M. Caillot suggests the following method of preparing this compound:—Hydriodate of iron is first formed, and then decomposed by carbonate of potash; for this purpose he takes four parts of iodine, two of bright iron filings, and about twenty of water. These three substances are to be put in a glass or porcelain capsule. The mixture is to be stirred until the liquor which soon becomes of a deep-brown colour, is rendered colourless; the liquor is then made to boil, and a solution of sub-carbonate of potash is to be added until precipitation ceases; or a small excess of the alkali may be used, and saturated with hydriolic acid after filtration. The residuum is to be washed till it ceases to afford a precipitate on the addition of permuriate of mercury: the filtered liquors being then mixed, the whole is to be evaporated till a pellicle appears.

The same process may be employed for preparing the iodides of

sodium, magnesium, calcium, &c. The iodides of mercury may also be prepared by decomposing the protonitrate and permuriate of mercury by means of hydriodate of iron, which, as just shown, may be formed extemporaneously.—*(Ann. de Chim. et de Physique.)*

Combustion of a Stream of Hydrogen Gas under Water.

Mr. Thomas Skidmore, of New York, has discovered that if the flame produced by the combustion of hydrogen gas, issuing in combination with oxygen from the compound blowpipe of Dr. Hare, be plunged below the surface of water, it continues notwithstanding its submersion in, and actual contact with, that fluid, to burn, apparently with the same splendour as it does in the common air. The only discoverable difference is, that when the flame burns into water, it seems, if the expression may be allowed, to conglobate its figure; whereas in the air, it assumes the shape of a long slender conical pencil. Care is required that the flame be introduced slowly and gently into the water, in order to avoid the recession of the flame into the interior of the tube, at its first entrance, which is apt to take place if suddenly immersed. To obviate this evil more effectually, tubes of a fine capillary bore are best adapted.

When a piece of cork or pine wood was applied to the submersed gaseous flame, it gave out a brilliant light, and this appearance continued till the recession took place, which, in some instances, might be for a minute or two. Small pieces of copper wire, 1-40th of an inch diameter, became red hot when exposed to the flame under water in full day-light. The discoverer of this property of the flame of the compound blowpipe suggests its application to the purpose of a submarine instrument of naval warfare, and thinks there are no difficulties in the way of its being so employed that may not be easily overcome.—*(Amer. Journal.)*

Drs. Lawrance and Coates' New. Experiments on Absorption.

The Americans are becoming quite indefatigable in their experimental researches. The present experimenters were assisted by a number of their professional friends, in repeating and varying the experiments of Magendie, Mayor, &c. The most novel of their investigations relates to the actual chemical combination of two substances separately thrown into the circulation. They commenced by throwing prussiate of potass into the abdomen, and green sulphate of iron into the cellular tissue, in order to try whether the well known result of their admixture, the prussian blue, would be produced in the vessels. This, however, did not take place; and they resolved to repeat it, by throwing the sulphate, as the article of more difficult absorption, into the abdomen, where this process went on with more facility, and the prussiate into the cellular substance. On performing this, they were gratified by the striking result of a distinct and beautiful blue in the thoracic trunk and its contents, and in nearly the whole substance and surface of the lungs. The blood threw up a coagulum of a strong blue colour, and the lymph and chyle from thoracic duct threw down a blue deposit. The animal manifested some difficulty of respiration, but walked about without any seeming pain. In another case, the blue was found in the urine, and in the lungs. In a third, the chyle of the thoracic duct was blue, but none of the other fluids nor the lungs. When the thoracic duct was tied, the urine was bluish green, but neither the serum of the arterial blood, nor the lymph below the ligature.-(*American Jour.*)

Fusion and Volatization of Charcoal.

The fusion and evaporation of charcoal has been effected in America with the assistance of Dr. Hare's

galvanic deflagrator. Prof. Griscom, of New York, describes the experiment in the following terms: "with a deflagrator, of considerable size and in good order, these experiments are, in fact, extremely easy: and with well prepared charcoal will never fail in a single instance. The surface of the fused charcoal is brilliant, with a metallic and frequently iridescent lustre. Upon the charcoal on the copper side, there is no appearance of fusion, but a crater-shaped cavity extremely well defined, with the proper fibrous and porous appearance of charcoal; every thing indicating that the charcoal is wasted from this pole, and transferred to the other. It seems to pass in the state of vapour, to be accumulated or condensed on the positive pole, and then to undergo fusion by intense heat. In about three seconds, a decisive result is obtained.

Charcoal, which has been thus fused, is found to have acquired a great increase of specific gravity. It sinks readily in strong sulphuric acid, though common charcoal floats readily in water with at least half its volume out. It is rendered also very difficult of combustion, but may be burned away, leaving no residuum if heated by a powerful lens in a vessel over mercury filled with oxygen gas. The gas produced was ascertained to be pure carbonic acid. Strong sulphuric acid may be boiled without effect on charcoal which has been fused. Even the strongest nitric acid in the cold does not act upon it, and at a boiling temperature, the action is very slight, and ceases the moment the heat is withdrawn.—*(American Journal.)*

HOSPITAL REPORTS.

St. George's, July.

Operations. — Amputation above the knee in consequence of disease in the joint, by Mr. Ewebank. On cutting through the muscles, down to the bone, a quantity of matter escaped.

Case of Fracture with depression.—A lad, about fourteen years of age, fell from a scaffold—fracture with depression on the parietal bone was discovered; a portion of which was removed by Mr. Brodie. On the removal of the bone, the pulsations of the internal temporal artery were observed: the patient only survived twenty-four hours.

On opening the head, there was extravasation of the whole hemisphere on which the fracture was found. Mr. Brodie examined the brain, and gave it as his opinion, that the extensive extravasation, accompanied with fever, was the cause of death, &c. &c.

Case of Carotid Aneurism.—Mr. Gunning cut down upon the common trunk, but whether a ligature or not was applied, as the tumour was not perceived to pulsate, we are not informed—the patient, however, we are told, died about three days afterwards from internal hæmorrhage.

July 28.—A large oval-shaped encysted tumour was removed from the cheek of a man aged thirty-two: it contained nearly an ounce of bilious-coloured fluid. The operation occupied twenty-two minutes or thereabouts—the hæmorrhage was but trifling—several ligatures were applied—the edges of the wounds were further brought together with adhesive straps and a roller. Sir Everard Home, Mr. Keate, and Mr. Gunning, were present during the operation.

St. Thomas's.

A case of fungus hæmatodes in the right arm of a woman, aged sixty-two, which has existed nine months, is at present in this hospital. The tumour is now of an enormous size: the patient is rapidly sinking.

Guy's.

Operations.—Friday, July 8.—Sir Astley Cooper extirpated a small chronic tumour from the breast of a young woman aged twenty-two. Also a large fungoid tumour from the nates of a girl aged fourteen, which made its appearance about twelve months ago. The patient has enjoyed good health up to the time of the operation, since which some trifling hæmorrhage has occurred—the disease extended some depth below the integuments.

Cases of Hydrocele.—Sir Astley injected two hydroceles, and excised carcinoma of the lip.

July 30.—A case of lupus, or rather we apprehend, of that inveterate species of disease called noli me tangere, was brought into this hospital. The patient is a young girl, small in stature for her age (seventeen)

of a fair complexion, and evidently of a scrophulous habit. The disease first attacked the bones of the nose, no vestige of which is left, and has now extended its ravages to the cheeks on each side, and upper lip, which is also considerably encroached upon. The left eye is among the dilapidations of the cheek; and the integuments, including the palpebræ, are also entirely removed, although the sight is not yet destroyed. We are not hitherto sufficiently acquainted with the greatest extent of the disease, which presents one of the most terrific appearances that can possibly be well imagined, to say more on the subject at present. The patient has attended various dispensaries without benefit, &c.

July 29.—A case of tetanus was brought in, occasioned from exposure to the night air, &c.

Treatment.—Enemata ol. terebinthinæ. infus. serpent. æther. rect. et tinct. opii. The patient has already experienced relief, the abdominal tension having considerably relaxed.

Sir Astley has eventually advised blisters to be applied to the inside of the thighs, which are afterwards to be dressed with tinct. opii, &c.

Remarks, &c. on the post mortem craniological appearances of KEPPEL *and* STOFFEL.

These malefactors, after their execution on Monday last, at Horsemonger-lane, for the murder of Mrs. Richards, at Clapham, were removed, in pursuance of the sentence of the law, to Guy's Hospital for dissection.

The conformation of the heads of Keppel and Stoffel, presents but little for craniological enquiry. In both the sentiment of property is perceptible. In Stoffel, the carnivorous organ, though but partially, is nevertheless developed in a greater degree than in Keppel, who was the active instrument in the death of the unfortunate woman. In Stoffel also, the organ of cunning is more distinct. Both their heads are evidently of a vitiated configuration; and with very little exception, might well be said to have been cast in the same mould. The superior part of the forehead, in each, is rather narrowed between the temples, flat and projecting backwards; in the seat of the animal qualities there is nothing very remarkable, save the general scantiness of organic developement. In fact, there appears to be, even here, in both, an equally limited preponderance, as far as external signs may be depended upon, between the animal qualities and intellectual faculties.

But, whatever is apparently defective in the cranium, is amply compensated for in the countenance. In Stoffel, the lower part of the face, from the nose downwards, is full and bluffy, with thick projecting lips:—the physiognomy, on the whole, is strongly marked, although nothing so very indicative of ferocity can be detected from its general aspect, as to pronounce it to be the countenance of an assassin. That of Keppel, on the contrary, in the contour, is salient and sanguinary, bordering upon savage imbecility; presenting, in fact, one of those faces that may truly be said to be the real index of the mind. Making every allowance for the alterations effected by a violent death, few as they may be in this case, and taking every other consideration into account, they certainly afford everything but a prepossessing appearance.

Gall, in his writings on organology, observes, that we must not expect to find a great developement of the carnivorous organ in all murderers. There are, he says, unfortunate circumstances under which an organ, even indifferently developed, may be so much excited that it may acquire a high degree of activity.

In the case of these unfortunate men, from everything that transpired previous to, and on the trial, it is very probable they never intended any serious bodily harm to the victim of their plunder when the robbery was first planned; but, that losing sight of the infirmities of old age, and in the dread of immediate detection, added to the little feeling of the ruthless hand that applied the fatal handkerchief to the mouth, he forgot, or perhaps what is more likely, the ruffian never once thought of it until the rueful experiment was about to be proved upon himself, that, without breath, life must soon be extinguished.

The enormity of the offence, putting the want of intention to murder out of the question, was sufficient of itself to call forth the last resource of the law; with which they have been justly visited, as a warning, we trust, to deter others from yielding to evil propensities, whether they may be a consequence of primitive organization, or a cultivated taste for the possession and enjoyment of other people's property.

London:

Printed by E. JUSTINS, 41, *Brick Lane, Spitalfields.*

Published by COX and SON, St. Thomas's Street, and 39, High Street, Southwark. Sold also by Sherwood, Neely, and Jones, Paternoster Row; Simpkin and Marshall, Stationers' Court; John Cox, Berner's Street, Oxford Street; Callow and Wilson, Gerrard Street, Soho; W. Stewart, South Bridge Street, Edinburgh; Hodges and M'Arthur, Dublin; &c. &c.

THE WEEKLY

MEDICO-CHIRURGICAL & PHILOSOPHICAL MAGAZINE.

No. XXVII.] SATURDAY, AUGUST 9, 1823. [*Price* 4*d*.

" FLORIFERIS, UT APES, IN SALTIBUS OMNIA LIBANT
OMNIA NOS, ITIDEM, DEPASCIMUR AUREA DICTA."

BIOGRAPHICAL MEMOIR OF THE LATE JOHN HUNTER.

(Continued from page 18.)

Mr. Hunter, in the year 1753, entered as gentleman commoner in St. Mary's Hall, Oxford. It is not stated by any of his biographers what his intentions, at this time, were. It is however, most probable, that until then Dr. William had not made up his mind to relinquish surgery. Certain it is, that he was not established as physician to the Lying-in Hospital till about that time, nor a licentiate of the London College till September 1756.* It might therefore have been his intention that his brother should be matriculated at an English university, with a view to his becoming a fellow of the London College. But whatever his motives were, we may consider it fortunate for himself and mankind, that the year following he was entered as surgeon's pupil at St. George's Hospital. This step may appear superfluous for one, who, by the range of Chelsea and St. Bartholomew's, had intercourse with Chesselden and Pott, the most distinguished men of their age. But according to the regulations of those two establishments, the chance of his becoming surgeon to Chelsea was very remote, and nothing but an apprenticeship to a surgeon of St. Bartholomew's, could be admitted as a qualification to become a successor. At St. George's the difficulties might be fewer, and the growing interest of his brother among the great might facilitate his admission.

Two years after his entrance as a pupil, Mr. Hunter was appointed house surgeon of St. George's Hospital. This office, it should be observed, is temporary, and may, with much propriety, be called that of resident pupil.

In the year 1755, Dr. Hunter admitted his brother into a partnership in his lectures; a certain portion of the course was allotted to him, and he was expected to supply the Doctor's place when professional engagements prevented his own personal attendance. This must have been a painful task for John. Anatomical lectures, to be rendered interesting, must be given extempore; a talent in which Dr. Hunter can never be excelled, any more than in an easy and perspicuous mode of demonstration. Unfortunately, few men were less suited to be placed in competition with him. But in the absence of this qualification, none could exceed Mr. Hunter in dissection, and making anatomical preparations; which in common hands may be considered merely as mechanical employments, but in Mr. Hunter's we shall see they were very different; and probably, to that habit of reasoning profoundly, which he evinced on all occasions, we may impute the patience with which, throughout life, he practically pursued his dissections. At this early period we find him active in the examination of criminals, with whose complaints he was previously acquainted, and even correcting by demonstrative evidence, the commonly prevailing errors concerning the formation of pus. But the most brilliant proof of his innate sagacity

* Life of Dr. William Hunter, by Dr. S. F. Simmons, p. 18.

in exploring nature, was shewn by a discovery in which all Europe was at that time engaged. Sir Everard Home gives him credit for his observations on hernia congenita. It is supposed, from his character, and borne out by all his writings, that Mr. Hunter would have been offended if he thought himself suspected of claiming any share in that discovery; the whole of which, even to the very appropriate term, was exclusively Haller's. But a correct knowledge of the progress of the testis into the scrotum was exclusively Mr. Hunter's; and marks, in the most striking manner, the strength of that genius which led him to a proper mode of conducting his enquiries.

About this period, too, Mr. Hunter traced the ramification of the olfactory nerves from the membrane of the nose, and discovered the branches of some of the fifth pair of nerves in the gravid uterus. He also traced the arteries to their termination in the placenta. Sir Everard Home says that Mr. Hunter was the first who discovered the existence of lymphatics in birds; and adds, in a note, that "an account of his injecting the testis; his description of the descent of that body, with observations on hernia congenita; and his experiments in proof of the veins not being absorbents, are published in Dr. Hunter's Medical Commentaries." In justice to Mr. Hunter's memory, it is necessary to remark, that only one of these papers is to be found in any collection published by himself; nor is there any proof that he assumed more. Mr. Hewson always claimed the discovery of lymphatics in birds; nor can it be found that it is yet disputed, by those who are the best judges. Dr. S. F. Simmons in his Life of Dr. Hunter, very fairly marks the share that Mr. H. Watson had in injecting the testicle —Baron Haller in hernia congenita, and Noquez in the doctrine of the absorbsents. In justice, however, to the Hunters, it should be understood, that John's experiments were not instituted to show that absorbent vessels exist, but that the veins carrying red blood have no share in that process.

Mr. Hunter devoted much time to the dissection and investigations of every kind of animal, which led him into a wide field, and laid the foundation of his collection in comparative anatomy.

In the year 1760, Mr. Hunter having just exceeded his thirty-second year, experienced symptoms which were thought to threaten consumption, and to render the residence in a milder climate advisable. It should be remarked that for a considerable part of his life, Mr. Hunter was subject to inflammatory complaints, which returned pretty regular in the spring, till they ended in that organic infirmity which imbittered his latter years, and suddenly deprived the world of his services.

In October, 1760, Mr. Adair, inspector of Hospitals, appointed him surgeon on the staff; and in the spring of 1761, he embarked with the army for Belleisle, leaving Mr. Hewson to assist his brother during his absence. To this fortunate event we owe so many improvements in military surgery.

He remained with the army, says Sir Everard Home, till the year 1763; and the knowledge he there acquired on the subject of gunshot wounds, makes no inconsiderable part of the present work.

While thus fulfilling his duty, and adding to the practical and scientific knowledge of his profession, he found time also to avail himself of the opportunities before him, in settling certain physiological doubts. The number of human subjects, recently killed, and in previous high health, enabled him to trace the healthy structure of every part, and the secretions of some with peculiar accuracy.

(*To be continued.*)

DR. GALL.

Of alienations accompanied with visions and inspirations.

Mental alienation is sometimes accompanied with visions and inspirations — particular symptoms which announce the disease to have acquired the highest degree of exaltation. The unfortunate creatures who are attacked with it in this way, conduct themselves in the most consequent manner in pursuit of the project they have formed; they act, as M. Pinel has likewise remarked, with a most unshaken determination and in the most irresistible manner. A patient of this description, strong in the support of a higher power, despises every effort that is made to dissuade him from his project, and puts himself above all human considerations. His behaviour is often calm; scarcely does he consider other men worthy of being the confidents of his secret motives. He hopes for nothing from their assistance; and in no respect is intimidated at their threats. Those who have felt, were it but momentarily, the effect of visions and inspirations, and who have not a familiar knowledge of nature, can scarcely suffer themselves to be persuaded, when they return to their regular state, that there was nothing of reality in all they had experienced. If these visions continue, does the patient hear incessantly, or at different times and places, of the pretended imperious voice that speaks to him? How then shall we find means to check him, at least to cause the irritation and internal derangement to cease? The most infuriate madmen frequently suffer themselves to be diverted from their designs by menaces at the sight of the keeper or the physician, or by mild and rational treatment; but what effect will every human effort produce upon a man to whom heaven and hell command, or who has them under his orders. M. Pinel quotes an instance of an old monk, who had lost his reason from devotion. He thought, on a certain night, that he saw the Virgin Mary in a dream surrounded by a choir of blessed spirits, and that he had received express orders to put a man to death whom he suspected of unbelief. This homicidial project would actually have been put in execution had the mad monk not betrayed himself by the expressions that escaped him, and had he not thereby been prevented from it by being placed in close confinement. The same author, M. Pinel, mentions the case of a credulous husbandman, whose imagination was so strongly worked up at hearing a missionary sermon preached, that he thought himself condemned to eternal fire, and that he could not prevent his family from suffering the same fate, but by what is called the baptism of blood or martyrdom. At first he attempted to murder his wife, who with the greatest difficulty only escaped him; soon afterwards his infuriated arm was directed against two of his young children, whom he barbarously sacrificed in cool blood to procure them eternal life. Having surrendered to the laws, he murdered a criminal who was in the same cell with him, still with the view of doing a work of expiation. His alienation having been proved, he was condemned to confinement for the remainder of his life in the Bicêtre. The solitude of long confinement, always calculated to exalt the imagination, and the idea of having escaped death, notwithstanding the sentence which he supposed to have been pronounced by the judges, aggravated again his delirium, and made him believe that he was vested with omnipotence, or according to his own expressions, that he was the fourth person of the Trinity; that his special mission was to save the world by the baptism of blood, and that all the potentates of the earth united could not take his life. His alienation besides was partial, and was confined solely to matters of religion; he ap-

peared, on every other subject, to enjoy the soundest reason. The same patient had passed ten years in the closest confinement, and after well-supported appearances in a state of calmness and tranquillity, it was determined upon to give him the liberty of the hospital yard with the other convalescents. Four years more of probation had again elapsed in the full belief that he was cured, when all at once he manifested anew his superstitious and sanguinary ideas. On a Christmas eve, he formed the horrible project of making an expiatory sacrifice of all that came before him. He procured a shoemaker's knife, took advantage of the time the keeper was going his rounds and gave him a blow when his back was turned which fortunatelyslipped over his ribs; he cut the throat of two insane patients who were by him at the time, and in this manner he would have continued his slaughter, had he not been promptly mastered, and the fatal consequences of his furious rage arrested.

At Berne, we were shewn some fanatics who, a few years before, wished to establish a new religious sect. As we remarked, in the principal, a great developement of organisation which disposes to visions, we asked the man if he had ever seen any spirits? The prisoner, whose name was Kœrper, replied in the negative. We then begged him to relate those events of his life which had produced the greatest impression upon him. He informed us, and his calm and composed countenance bespoke his sincerity, that, from his infancy, religion had occupied all his thoughts, and that he had, consequently, read the bible and all the commentators upon it, with the greatest application; but, that the extreme diversity of opinions he found among them, had convinced him it was not in that manner he should find out the true religion; that he then gave up all further reading and enquiry, and addressed himself to God, earnestly beseeching him, should it not be contrary to his eternal decrees, to reveal the truth to him immediately. After having prayed one night for a length of time, he saw his bedroom filled with a light as brilliant as if it had been produced by several suns. In the midst of this splendour our Saviour appeared and revealed the true religion to him. Kœrper sought to spread it abroad with indefatigable zeal, which was, in his opinion, an obligation imposed upon him. In short, it was utterly impossible to make this man perceive that his mind was led astray by illusions.

(To be continued.)

To the Editor of the Weekly Medico-Chirurgical and Philosophical Magazine.

Sir,—You will oblige a constant reader and admirer of your respectable and widely circulated Magazine, by giving insertion to the following letter, as the first of a small series on the same subject; namely, the cause or causes of the appearance of scurvy, and other diseases among the prisoners confined in the Milbank Penitentiary, which, unless checked by the timely interference of the legislative body, may prove a source of a more extensive evil, not only within, but beyond the precincts of that solitary mansion of the equally guilty and unfortunate.—I am, Sir, &c.

PHILANTHROPOS.

(No. I.)

To Dr. Roget and Dr. Latham, jun.

Gentlemen,—Permit me to address you through the medium of the impartial columns of the WEEKLY MEDICO-CHIRURGICAL and PHILOSOPHICAL MAGAZINE, upon a subject on which your indefatigable zeal, activity, and scientific intelligence, for the public good, have already been called into action with so much discrimination and candour—a subject, in fact, that more than ever calls, not only for the continuance of your laudable investigations, to sift the evil to the bottom, but equally

for the exertions of every individual actuated with sentiments of benevolence and commiseration in the cause of suffering humanity. And, give me leave again, gentlemen, to assure you, once for all, that whatever difference in sentiment or opinion may be apparent throughout the course of the succeeding observations, and few indeed these will be, they emanate from the best motives and purest intentions: viz. a desire to elucidate rather than to obscure—a spirit of communication and inquiry, rather than a propensity to dictate or to contradict. With these objects in view, I shall, in the first place, laying aside every other less important matter on the subject, proceed directly to investigate that part of your late enquiry, relative to the cause of the disease in the Milbank Penitentiary, which exists, as you state, independent "on the situation of the prison;" by premising my remarks with the firm conviction, that the dampness of the scite, on which the building is erected (in a more marked degree than you have been pleased to admit) but taken collectively with the poorness and scantiness of the diet, and last, though not least, the unusual severity and rigidity of the internal discipline —the transition from a more wholesome and less stunted regimen, taking into the account, the mental depression in consequence of seclusion from the world, are the principal, if not the actual and only causes of the appearance of scurvy, dysentery, and diarrhœa, among the prisoners confined in the prison at Milbank.

With every deference, however, to certain points of your opinion and that of your colleagues, on this head; viz. that these diseases are independent of the situation of the prison, I must beg leave nevertheless to differ from you *in toto*. Neither can I admit, that the non-appearance of the disease until a certain stated period (the winter of 1819,) can be any proof of its independence of situation, because the same diseases had not manifested themselves until a more remote period.

Every state of bodily derangement, and consequent functional disorganization must have a cause—and before this cause can be identified as the origin of the disease, certain advances are necessary to its confirmation—to be brief, its commencement or first appearance must exhibit signs characteristic either of an idiopathic or of symptomatic nature. It is equally true, that it is frequently no easier matter to trace diseases to their remote causes, than it is to ascertain how long the seeds of them have been sown, before they make their appearance, as well as to decide upon them after they have appeared. Still, in the absence of more certain diagnostics, those which immediately present themselves ought, more decidedly, to fix the attention, than such as are purely hypothetical and obscured.

In the second place, gentlemen, in allusion to the situation not being a cause of the diseases, you observe—

"That the officers of the prison, had this been the case, being equally obnoxious with the prisoners to any injurious influence of situation, could not have been universally exempt, as it appears they have been, from the same disease."

This comparison is so wide of justness or similarity that, I regret to say, it refutes itself at the first view. For what affinity in point of influence, can there exist, gentlemen, between individuals diametrically opposed to each other from a different combination both in moral and physical circumstances? At the same time, the "officers of the prison," are, in proportion to the aggregate number of the prisoners, as one to fifty or more. It might as well, in fact, be said, that the epidemy in the Penitentiary, is not dependent upon situation, because all the prisoners alike to a man, have not been attacked by it. If not the majority, many of them have escaped it. More-

over it must obviously strike the mind of every one, that, among those who have escaped the disease, certainly the officers of the prison, whose diet is under their own controul, with suitable changes of clothing —clean beds, after the toils of the day, and every other comfort and convenience which their calling secure to them—breathing, besides, a purer air, when not actually on their duty—enjoying the same rational liberties and immunities, in every sense of the word, as their fellow creatures at large; certainly, I say again, and it must be universally admitted, that these men are, evidently, under such considerations, if no other cause existed, much better calculated to resist the influence of disease, than the poor, half-starved, emaciated, and melancholy prisoner, undergoing an ignominious punishment, —worked hard by day and locked up at night in a dark solitary and damp cell,—breathing perpetually a stream of contaminated air from a variety of surrounding causes, together with the heart-rending idea ever present to his mind, of years of similar durance, without a friend or relation to visit him, or a single cheering prospect in the perspective to rouse his drooping spirits.

"Thirdly,—You observe, because if the situation of the prison be injurious, it must be presumed to be so in consequence of marsh miasmata arising in its neighbourhood; yet since its establishment, the prison has been altogther free from those diseases which marsh miasmata invariably engender."

To these equivocal data, I shall simply put the following questions with their answers, and without erecting them into anything like syllogistic deduction, leave them to speak for themselves. viz. what are among the remote causes of dysentery? A specific contagion. Does not a specific contagion arise from marsh miasmata? Certainly it does. —What are the other causes that give rise to dysentery? All the causes producing spasm and ulceration—much humidity—unwholesome food—noxious exhalations and vapours. Now, again, what are the exciting causes producing spasm and ulceration? Vicissitudes of temperature—exposure to cold united with moisture—affections of the mind. What, we ask once more, are the causes producing scurvy? Defect of nourishment—want of cleanliness—cold and moisture— or the transition from a cold to a warmer temperature —impure air — depressing passions of the mind, &c. Moreover, I may take it upon me without fear of contradiction to assert, that scurvy and dysentery, whether arising from marsh miasmata, or from other remote and exciting causes, may exist without being complicated with intermittents, equally as certain, as that the latter may be present, without being associated with either of the former.

"Fourthly," You advance that "marsh miasmata always arise during the hot but never during the cold season of the year; and the diseases they engender belong to the same class."

To this doctrine, in a general point of view, it is impossible for me to subscribe—from the well known prevalence of intermittents in spring and autumn, in certain marshy countries; and which if caught in either of these seasons of the year, and not cut short by active measures, they are generally more protracted and inveterate than any of the same description which may attack in the middle of summer. But, however this may be, there appears to be sufficient cause, in the Penitentiary at Milbank, for the existence of internal disease, on a very extended scale. The situation, in a low swamp, on the margin of the Thames, the free current of air intercepted on all sides — the architectural anomalies, every thing, in fact, tends to confirm the still prevalent opinion that a spot worse calculated in point of salubrity alone, for a prison destined to immure, for a number of years, hundreds of unfortunate creatures, could

not possibly have been pitched upon. The late and increasing number of inquests strongly corroborate these assertions; and it is possible, gentlemen, that since the time your report of the Penitentiary was given into the honourable the Common's House of Parliament, you may have reason to correct or modify much of your opinion relative to the situation of the prison not being among the remote or other causes of disease connected with it. We shall, for the present, therefore, defer any further remarks on this particular topic; and proceed in our next letter on this subject to another point of enquiry, viz. "the influence of diet." At the same time, we cannot refrain from observing that, notwithstanding the confidence with which you have stated "*that every part of the prison is singularly dry; and that on no floor or ceiling, or wall of the prison,*" you have found the "smallest appearance of stain or moisture, there is much reason, nevertheless, to apprehend, from a variety of conflicting circumstances, which, in all probability may, at the time, have escaped your observation, that such a desideratum, in a local point of view, with respect to health, as far as regards the Milbank Penitentiary, exists more in appearance than reality. I am, gentlemen, most respectfully, &c.

PHILANTHROPOS.

From Paris' and Fonblanque's Med. Juris.

(Continued from page 26.)

Adulterations of Food.—The authors are inclined to believe that the alarms created lately on this subject are in many respects groundless. As regards the article of flour and bread, there is every reason to believe this to be the case, or at least that the extent of the adulteration is over rated. The evidence of our senses, if we would confide in them, rather than in unproved assertions, would inform us that this fault is of rare occurrence. They are inclined to believe that the more serious and extensive adulteration in malt liquor are carried on by the publican, and not by the brewers.

Policy of insurance on lives and survivorship are subjects on which the opinion of a medical witness is often required; in the first instance, as to the existence and probable consequences of particular diseases; and in the second, as to the influence of events in retarding or accelerating the approach of death. In the first instance our courts allow a considerable latitude, requiring only that proof shall be given the party on whose life insurance is made shall be in a reasonable state of health, even where there is an express warranty of good health. And even if the person, whose life was insured, laboured under a particular infirmity, if it can be proved by medical men that it did not at all, in their judgment, contribute to his death, the warranty of health bas been fully complied with, and the insurer is liable. Vol. I. p. 383. In determining the probabilities of survivorship, the difficulties are much more considerable, and it is in a very small number of cases only that the information afforded by medicine and physiology can be successfully applied in making a decision. In no country are such questions more likely to occur than in our own, from the deficiency of any positive enactments, or well-established precedents. We agree with the authors in thinking that the order of nature affords the best general rule, and that therefore, in the absence of all evidence to the contrary, the natural succession should be admitted, as if no accident had occurred.

We now come to the third and most extensive division of the treatise —the enquiries which are necessary to medical evidence in criminal cases.

Of Arson.—The charge of arson, say the authors, may occasionally become the subject of scientific research, and the accused individual receive an honourable acquittal at the

hands of the chemical philosopher, by whose interposition the conflagration, unjustly imputed to malice, may be proved to have originated from a spontaneous process of decomposition.

The principal sources of spontaneous combustion are friction, as in the case of machinery; the fermentation of vegetable and animal subtances; and other chemical actions, as the accension of oils by various animal, vegetable, and mineral subtances; ignition of lime by the effusion of water; ignition of pyrites, causes from which such accidents have frequently happened.

Human combustion is one of those phenomena so completely opposed to all our preconceived ideas, that without incurring the charge of improper scepticism, we have a right to look for unusually strong evidence before we yield up our belief. Ploucquet enumerates twenty-eight cases, and the journals of different nations present us with a variety of examples, all of which, with some slight shades of difference, appear to have been attended with the same phenomena; a fact, as the authors admit, affording internal evidence of their authenticity. On the other hand, say they, only one is related where the person survived for a short time, and gave an account of the manner in which he was struck with the fire: in none of the others has it been known in what way the fire commenced or proceeded. A circumstance which seems to prove the possibility of such occurrences is, that the human body, in its natural state, is remarkably incombustible, and that it is impossible to suppose that the bodies found consumed could have been burned by ordinary means. We are told, too, that in some of the cases the fire has little injured, or even not at all, the combustible things that were in contact with the body when it was burning!

Rape.—It is necessary to expatiate on the legal or moral atrocity of violation. In such cases the medical practitioner is frequently called upon to determine points of the most difficult and delicate description. Of all the questions to which they give rise, two deserve more particularly to fix our attention; namely, the external and obvious signs of violence; and the proofs of coition, whether voluntary or violent. In the greater number of cases we do not hesitate to say that the former are the most important, and most to be depended on. Many motives may induce a female who has incautiously granted her favours, to make an accusation which it is often difficult to rebut; and it is not easily believable, except in cases of extreme disparity of strength, that a ravisher should accomplish his objects without the exertion of a degree of violence which could not fail to leave some permanent proofs behind. Another exception is in the case of children under that age at which the law supposes them capable of giving a consent. The proofs of coition, epecially in those not virgins, are very imperfect; but it should be remembered, that it is in all cases of the first necessity that an examination, to be conclusive, should be instituted at the earliest possible period. The surgeon should be aware that in children the presence of mucous discharges, unsupported by concurrent circumstances, can have but little weight in establishing an accusation of this nature. They are naturally by no means of unfrequent occurrence, although occasionally giving rise to unjust and unfounded suspicions. The authors advise, that the external signs of violence be enquired into upon the spot on which the crime is said to have taken place, that the state of surrounding objects may be determined. The existence or absence of the hymen, even in virgins, it is now generally admitted, does not authorise any positive inference. It seems probable, that, as the authors admit, medical evidence can

never materially elucidate the fact, unless the crime be violent, and accompanied by material bodily injury.

(To be continued.)

OMBONI ON CLINICAL MIDWIFERY.*

Passing over the preliminary observations, we proceed at once to the detail of facts related in this work. The total number of births was 48; of which one happened in the sixth month of gestation, three in the seventh, one in the eighth, and all the rest at the natural period. The case of abortion in the sixth month was induced by the mother's striking the abdomen by a fall; in two of the seventh month cases, labour followed serious hemorrhage, resulting from a partial detachment of the placenta; in the third, it was in consequence of fatigue during a long journey; the case at eight months occurred in a woman whose pelvis was deformed; and we are told that in all these premature cases, labour had so far advanced before they were received into the hospital, that there was no possibility of checking the process.

Of the forty-eight cases twenty-four were natural, twenty difficult, and four preternatural. The cases of difficulty depended on various causes; in eight of them the subjects were robust, the os uteri resistant and undilatable; in these bleeding from the arm was practised, and repeated in some even three times; which treatment, together with employment of oily injections into the vagina, was attended by the happiest results. In one case, the difficulty was induced by the strength of the membranes, which it was necessary to rupture artificially; in another, the same effects ensued from the premature rupture of the membranes, followed by great resistance of the os uteri, subdued in the manner already described. One case was rendered difficult by the prolapse of the anterior lip of the os uteri, which it was necessary to support with the finger until the head was expelled. Two cases of prolapsus of the anterior part of the vagina required the same support. In two cases, besides some of the above-mentioned difficulties, the shoulders did not perform the usual motion in the hollow of the pelvis, from the diagonal position which they occupied at the superior aperture; so that it became necessary to employ two fingers of each hand, applied to each of the shoulders, to elevate the one and depress the other. One case was rendered difficult by the descent of the right hand on the right side of the head; and this did not admit of being remedied by pushing the hand and keeping it above the head. A slight difficulty was produced in one case, the occiput being turned to the right sacro-iliac symphysis, and the chin (when the head occupied the hollow of the sacrum, and was nearly expelled), having been forced from the sternum, the face by this means presenting with the chin directed upwards. This occurrence may be attributed to the large size of the pelvis, the smallness of the head, and the position in which it was placed, the uterus acting rather on the chin than the occiput, by that means separating the former from the sternum, and forcing it downwards. Labour was difficult in one woman, who was anasarcous, and in whom the labia and perineum were œdematous, and the uterine action so imperfect that it was necessary to excite it by dry friction of the abdomen, the application of warm cloths, and some spoonfuls of mint water. Two cases were rendered difficult by the presentation of the nates, the feet being directed towards the left sacro-iliac

---

* Prospetto clinico dell' Istituto di Ostetricia presso l' I. R. Universita di Pavia, diretto dal Signor Profess. P. Bongioanni; dal 15 Ottobre, 1820 al 15 Ottobre 1821; esposto dal Dr. G. Omboni, Assistente dello stesso Clinico.

symphysis,* and the breech having descended into the pelvis at the time of the rupture of the membranes, so that it was impossible to push it back and extract by the feet. This, we may add, was unnecessary. Both cases ended favourably. The other complications met with, were an anterior obliquity of the uterus, the shortness of the funis, either absolute or the result of its being twisted round the child, and in one instance a reducible femoral hernia on the left side. Besides these, one case was difficult in consequence of the deformity of the pelvis, the sacro-pubic diameter ascertained by Baudelocque's compass being only three and a half inches, while the diagonal was natural; this might have rendered the forceps necessary had the child been large or full-grown; but fortunately labour occurred in the eighth month, and the child being small, and the bones of the skull yielding, no assistance was required, although there was some difficulty, the pains being very strong, the head much elongated, and the parietal bones overlapping considerably.

Of the preternatural cases one was the result of hemorrage, produced by the partial detachment of the placenta, which was attached to the neck and mouth of the uterus. As the hemorrhage, which had continued for eight days, threatened the life of the mother, although she was only in the seventh month, the os uteri being also soft and yielding, it became necessary to resort to artificial delivery immediately after the admission of the patient. Not being able to feel the presenting part of the fœtus, the Professor introduced his right hand, ruptured the membranes at the edge of the placenta, found the head presenting with the occiput to the right acetabulum, and terminated the labour by extracting a dead child, the toes being directed to the right sacro-iliac symphysis.

The second preternatural case was also dependent on hemorrhage, but in this, an edge only of the placenta was detached and pendent from the os uteri. Besides the loss of blood, the back of the fœtus presented, the shoulders being turned to the left acetabulum, and the nates to the right sacro-iliac symphysis. The membranes having burst before the admission of the patient, an attempt was made to turn; but the os uteri, which seemed soft and yielding, presented such resistance (it being the seventh month of a first pregnancy), as to render the introduction of the hand impossible. The hemorrhage ceased by rest, and the woman being strong, blood was taken from the arm, and oily injections thrown into the vagina, until the os uteri became so lax as to admit the extraction of the fœtus by the feet, in the same direction as in the former case.

The third case was caused by total inertia of the uterus, which appeared to depend on the patient's having received a blow on the abdomen by a fall, and also on the death of the child. The feet presenting with the toes to the right sacro-iliac symphysis, admitted of the extraction of the fœtus, and that with facility, as it was only in the sixth month and the upper part of the cranium was wanting.

(*To be continued.*)

* We have followed the arrangement adopted by the author, but presentations of the face, breech, and feet, which he classes among difficult labours, would with us be considered as preternatural.

*Dr. Schlagintweit on Artificial Pupil.**

At the time that Dr. Schlagintweit published his treatise† on the state of the operation for artificial pupil in Germany he promised to communicate the results of his practice with his iris book, an instrument calcu-

* Erfahrungen über mein Iriankistron, von Dr. Schlagintweit.

† Ueber den gegenwärtigen Zustand der künstlichen Pupillenbildung in Deutschland. München. 1818.

lated for the performance of corodialysis in a manner approaching somewhat to the operation of Reisinger. In the present essay he has acquitted himself of this engagement, and we proceed to submit it to our readers in his own words.

Of thirty operations on the eye, which I have had an opportunity of performing since my return to my native country, three consisted in the formation of artificial pupils.

The first patient was M. Kilian Gubitz, prelate of the Chapter of Miederaltaik. In early youth he had totally lost the right eye, and in the left a soft cataract formed about the time that I dedicated my treatise "De cataractum origine" to him: this was successfully divided by my excellent teacher Walther, in the summer of 1817. Scarcely however had the patient enjoyed his sight for a month, when an arthritic iritis took place, and in spite of the best treatment, terminated in the closure of the pupil. In March, 1821, I saw the patient, and found the bulb healthy, the cornea clear, excepting at the point corresponding to the operation, the pupil almost wholly closed by a plug of puriform lymph, and the perception of light but imperfect.

On these grounds, the prognosis was not good, and I proposed the operation only as the means of probable relief, without any risk of aggravating his condition. He gladly consented, and on the 4th of May I undertook the operation. A tolerably large pupil followed the use of the hook, in spite of the motions of the eye, and I then brought out the instrument, together with the edge of the iris, through the wound in the cornea. A small quantity of blood appeared in the new pupil, but this had disappeared by the following day. On the 9th May the patient clearly distinguished light; on the 11th, he could discern objects, and speedily, to his great joy, regained a considerable power of vision.

The second case was a leucoma corneæ, which extended from its lower segment, and occupied two-thirds of the membrane, so as to obscure the pupil completely. The upper part of the cornea appeared clear, and when the eye was directed downwards, allowed the pupillary edge of the iris to be seen not adherent. The perception of light was perfect.

This being the case, I made an incision a line broad, with a double-edged knife, in the upper part of the cornea, and introduced my iris hook. The eye being directed downwards, I then fixed the hook, with the assistance of the forceps blade, in the pupillary edge of the iris, and withdrawing the instrument, effected a prolapsus of the iris through the wound in the cornea, without the difficulty so frequently attendant on the single hook.* Vision immediately became perfect, and the patient could see all surrounding objects. On the 9th day after the operation, as no appearance of disease remained, I dismissed the patient to her home at her urgent desire.

The third case was a central leucoma with anterior synochia, the consequence of a neglected inflammation with hypopium and ulcer of the cornea. When the eye was directed downwards, the upper part of the pupillary edge of the iris was seen to be unadherent, whence I resolved on the formation of an artificial pupil; but I soon became convinced that the iris was incapable of any extension from the adhesion of its under part with the cornea. I therefore changed

* It will be seen from these particulars that Dr. Schlagintweit's operation of corodialysis differs from Reisinger's principally in bringing the pupillary instead of the ciliary margin of the iris into a state of prolapsus between the edges of the wound in the cornea. For a more particular description of the operation and of the instrument, we refer our readers to Mr. Guthrie's Treatise on Artificial Pupil. p. 71, &c.

my plan, introduced my iris hook into the anterior chamber as far as the ciliary edge of the iris, and brought that part of the membrane into the opening of the cornea.

The new pupil appeared perfect, though partially filled with blood, but on opening the eye afterwards I was chagrined to find that the prolapsus of the iris had escaped from the wound in the cornea, and that in consequence the separated portion of the membrane had been left at liberty to retract to the ciliary ligament. The eye was not injured by the operation, and the patient now awaits the repetition of the corodialysis.—*(Langenbeck Bibliothek für die Chirurgie und Ophthalmologie 3n Bund. 3es Stuck.)*

MELANGE.

Dr. Knox on the Spur of the Ornithorhynchus Paradoxus.

The ornithorhynchus paradoxus, or duck-billed platypus, of New Holland, has since its discovery, been a standing puzzle for naturalists. A quadruped, with a bill like a duck, and webbed feet, destitute of mammæ, &c. could neither be ranked with the mammalia nor with birds. The dissection of one by Dr. Knox, of Edinburgh, has thrown some light upon its history, particularly upon a singular spur situated upon each of the hinder legs of the male, and supposed by Cuvier to be what he calls a sexual prehensile, or instrument for laying hold of the female. To overthrow this notion, late investigation has proved it to be a poisonous organ; and Dr. Knox's dissection has confirmed this, by showing that the spur is open at the extremity, and furnished with a canal, through which passes a bristle shaped membrane, that may answer the purposes of a sting, united at its base to a duct that communicates with a poisonous gland in the body of the animal, hitherto supposed to answer a different purpose. The spur is, therefore, an instrument of defence. —*(Report of the Wernerian Soc.)*

Cuvier's Account of a Fossil Human Skeleton.

The only place where human bones have been found imbedded in rocks, is the island of Guadaloupe, in the calcareous strata of whose shores several have been found, particularly one which was discovered and preserved by the directions of M. Ernouf, governor of the island, and which passing into the hands of the English at its reduction under Lord Cochrane, is now in the British Museum. At the peace, M. Donzelot was directed by the minister de la marine, to send one of these fossils to France, and his researches have been successful in finding a more perfect one than that found by M. Ernouf. It wants the cranium, but the greater part of the upper jaw, with some teeth, is preserved. The rest of the skeleton is in a bent position,—almost that of a semi-circle. It was quite hid in the calcareous stone; but the bones had suffered no change, possessing their gelatinous animal matters, and their inflammability. The stone contains besides, well preserved specimens of both the sea and land shells still common in the island, a fact which proves that the skeleton is recent.—*(Report of the Institute of France.)*

M. Pfahler's Case of Scrotal Calculus.

A man, aged 31, had had two calculi cut out of his scrotum when he was seven years old, and was again affected with the complaint, with violent pain, dysury, and impotence. M. Pfähler cut out three calculi lying close to the testicle, and weighing an ounce and a half. A quantity of fœtid urine flowed from the wound, and with it eleven stones as big as lentils; and still more were removed on cleansing out the scrotum with lint. The parietes were much thickened, but the wound did not heal

from the stillicidium of urine, till a catheter was introduced into the bladder by the urethra, and suffered to remain six weeks. The man remained well for ten years after. The case is explained to have arisen from a harnia inguinalis cystica, which disappeared after the operation.—*(Nye Hygæ Copenhagen.)*

Blumenbach on the Prickle in the Lion's Tail.

Homer, Lucan, and other ancient authors say, that, when a lion is enraged, he stimulates himself with the blows of his tail. Didymus, of Alexandria, in commenting on the passage in Homer, says that the lion has a black prickle in his tail, among the hair, like a horn. This, which was supposed to be mere poetical fiction, has been proved to be correct by the recent observations of Blumenbach, who found in a lioness which he dissected a very small dark coloured prickle at the very end of the tail, and as hard as a piece of horn. The minuteness of it, however, makes it impossible that it could be used as Lucan describes. Dr. Brewster and Mr. Jamieson say they have observed a similar prickle at the end of the tail of the leopard. —*(Edin. Phil. Jour.)*

M. Hufeland on the Methods of procuring Abortion.

After a display of eloquence in deprecating the abuse of the knowledge of the means for procuring abortion, by miscreants, who murder embryos in silence and secrecy, M. Hufeland goes on to enumerate the causes of abortion, such as violent bursts of passion, privation of nourishment, hemorrhages, falls, shocks, &c. The artificial imitations of these are numerous, and have been infinitely varied, among which, are leaping from a height, violent exercise, such as dancing, riding on horseback, or in a cart without springs over a rough road, drastic purgatives, such as aloes, savin, and hellebore, strong emeties, carbonised and chalybeate waters, to excite uterine plethora, blood-letting from the feet, leeches to the privities, injections, &c. To produce menstruation alone, will often suffice, and M. Hufeland, who has a stronger belief than we have in the efficacy of emenagogues, says, that this is always in the power of the practitioner, and that he ought therefore to be much on his guard, when called to a supposed case of suppressed menstruation, to ascertain whether or not there be pregnancy. He has seen a case of this kind in which the patient had an abortion two hours after taking a strong emetic. He then gives cases in which pregnancy was mistaken for dropsy, and treated with drastic purgatives, without any injury either to the mother or child. —We think the very enumeration of these violent means would deter any body but a brutal villain from the attempt, and yet we fear that it is but too common, not among professional men (God forbid) but among the more unprincipled part of our population. Glauber's salts is, in these cases, the usual purgative made use of, and we have heard of this medicine being taken in such cases in doses almost incredible. The guilty mother is of course always endangered by these means, and the person who is accessary to the crime, runs the hazard of perpetrating a double murder.—*(Journ. der Heilkunde.)*

Impregnation.

M. Mondat regards the *aura seminalis* as the active part of the semen; and quotes, in support of his opinion, the following decisive experiments performed at Turin by himself and two other physiologists. The semen of a dog having been received into the cup of a funnel bent for the purpose, its tubular part, ten inches long, was thrust three or four inches into the vagina of a bitch in heat, to

convey to the uterus the aura seminalis. In eighteen out of thirty trials impregnation was produced: and the same result was obtained upon two mares.—*(Journal Universal. Fevr.* 1823.)

Diagnosis of Adhesion of the Pericardium to the Heart.

When the pericardium adheres to the surface of the heart, a shock may be felt in the left hypochondrium, succeeded by a manifest depression or drawing in of the integuments. The formation of the concavity is synchronous with the dilatation of the arteries, and the shock with their contraction. During respiration the concavity is deepest, but the shock is feeblest; and the reverse is observed, during expiration. The cause of these phenomena appears to be the connexion of the heart to the diaphragm through the medium of the adhering pericardium, in consequence of which the diaphragm must follow in part the motions of the apex of the heart. When the ventricles contract, (and the arteries dilate), the heart is shortened, and its point rises, when the auricles contract, (and the arteries also), the heart is lengthened, and its point descends. The diaphragm opposite the point must follow these motions, and the alternate impulse is communicated to the adjoining integuments. The concavity is deepest during inspiration, because, during the descent of the diaphragm, the apex of the heart is farthest removed from the place it must occupy when the ventricles contract, and the dragging of the diaphragm consequently most powerful. But the shock is weakest, because the auricles which produce it are farthest removed from the part on which the shock is primarily impressed. All these circumstances are evidently reversed during expiration. — *(Dr. Sander. Arch. Gén. de Med. Fevr.* 1823.*)*

Carditis caused by Poisoning with Arsenic.

A man ate a bit of bread, and a sausage and a half, poisoned with arsenic. In two or three hours he was seized with vomiting and diarrhœa. The usual symptoms succeeded, and he died 48 hours after the fatal repast. The whole body was rigid. The stomach was natural externally, internally of a deep red colour, not removed by washing or scraping, and near the duodenum there were several roundish specks, varying in size from that of a sixpence to that of a crown piece, of a brownish hue, but whether ecchymoses or eschars, could not be determined. The villous coat was swelled there, but not feeble. The œsophagus was natural. The duodenum and the upper part of the jejunum had a deep red colour, and all the other intestines were strongly injected. The left cavities of the heart were of a mottled red colour; and in the ventricle, especially on its *columnæ*, there were many small crimson specks, which penetrated into the substance of the parietes. The right cavities had a deep reddish-black colour, and the columnæ of the ventricle showed specks like the left ventricle, but less numerous or distinct. The aorta and other vessels were natural. Arsenic was found by analysis in the remains of the suspected food, in the vomited matter, and adhering to the inside of the stomach, *though the man had vomited incessantly for more than forty hours.* The author adds, that he had previously found in experiments with arsenic upon animals, that the contractility of the heart was destroyed, and its tissue often inflamed.—*(Orfila, Arch. Gén. de Med. Fevr.* 1823.*)*

Signs of Death by Hanging.

An insane patient at the hospital of Salpêtrière, was seen hanging herself in one of the gardens. An attendant immediately ran up, and cut the rope; but all attempts to

restore animation proved unavailing. The features were composed and natural, and the skin not discoloured or ecchymosed. There was a double mark on the neck, for the rope had been twisted round it twice; the mark was a simple depression, *without any change of colour*. In three hours and a half, no alteration had taken place. In seven hours and a half the body was cold, and began to stiffen; the face was a little discoloured, the legs livid, and the rope-mark of a *light brownish tint*. In twenty hours the features were somewhat bloated, violet-coloured but not distorted; and the eyes were open and brilliant. The body was examined twenty-five hours after death. At that time the rope-mark was brown, as if the cuticle had been burnt; but there was no ecchymosis in the vicinity. The cellular tissue beneath was dry and compressed, so as to form a *brilliant white band a line and a half in breadth*. The scalp was injected with black blood. The lungs and heart were quite natural, and *not gorged*.

The author justly remarks, that if reliance was to be put on the signs of suspension as they are related in works on Medical Jurisprudence, the foregoing case *(especially if it had been examined within the first six hours)* must have been attributed to suspension *after death*. He is wrong, however, when he states, that all medico-legal authors are at one as to the signs in question; for his countryman Fodéré has explicitly declared, that they are not invariably present. The author farther maintains, that the remarkable differences observed in the bodies of hanged persons arise according as the rope has been left round the neck till the body cooled, or removed (as in the case described above) immediately after death. We shall probably recur to this subject on an early occasion, when we hope to show that these differences depend on another cause; and, at all events, that the explanation he has given will not account for all the facts. We may just add at present, that we compared the foregoing description with the appearances in the body of a woman lately executed in this city, and found it to agree with them *exactly*, except that there was no *brilliant band* in the subcutaneous tissue under the rope-mark.—*(Esquirol. Arch. Gén. de Méd. Janv.* 1823.*)*

Dr. Haslam on Unsoundness of Mind and Imbecility of Intellect.

The introduction of the term unsoundness, to denote a particular state of disordered mind, which is supposed to differ from idiotcy and lunacy, has, according to Dr. Haslam, been the source of considerable perplexity to medical men: and opens, as he thinks, an avenue for ignorance and injustice. Figurative terms, indeed, introduced under a loose analogy, always tend to error and confusion. In the Portsmouth case, lately tried by commission, this confusion was notorious, several medical witnesses deposing that Lord P. was of sound mind, and others, that his mind was thoroughly unsound. Dr. Haslam, therefore, solicits the Lord Chancellor to elucidate the nature of this unsoundness of mind on the first opportunity, that medical men as well as jurymen may know what it is, and depose accordingly. We are glad to hear Dr. Haslam saying in the most decided manner, that he is certain the indications of craniology on the subject, will never be accredited in a court of justice, while the Lord Chancellor guides the helm. Lunatics, according to vulgar, and even legal opinion, are at times insane, and at times of correct intellect; but Dr. Haslam says, that the changes are only remissions and exacerbations of insanity, and are most erroneoualy supposed to depend on the changes of the moon. Mere *imbecility*, says the Lord Chancellor, or inability to manage a man's affairs, will not amount to evidence that he is of un-

sound mind, "which is some such "state as is to be contra-distinguished "from idiotcy;" but this state is not defined, though the Lord Chancellor in the Portsmouth case, in Jan. 1823, says expressly, "incapacity to manage his affairs, being considered as evidence of unsound mind."—Dr. Haslam has not solved, nor attempted to solve the difficulty, nor unravel the confusion; but he has distinctly shown what is wanting.—*(Letter to the Lord Chancellor.)*

M. Legras on Syrup of Acetate of Morphine.

Dissolve 4 gr. of acetate of morphine in an ounce of distilled water, cold; and add 15 ounces of common syrup. The transparency will not be altered; the taste will be slightly bitter, and leave a slight astringency in the throat. The salt itself ought at first to be employed in small doses, such as the eighth of a grain. Six drachms, divided in doses, of the syrup of morphine, prepared as above, M. Legras says, has cured a diarrhœa which had continued many months. The salt employed to the extent of a grain a day has never been observed to produce any symptoms of narcotism, though often employed in the dose of two drachms. —*(Cercle Medicale.)*

Dr. Yule on the Internal Structure of Seeds.

Dr. Yule has laid a paper before the Wernerian Society of Edinburgh, in which he undertakes to describe more accurately than has hitherto been done, the internal structure of seeds, having detected numerous vascular receptacles for the various plumules of seeds, so that when one plumule is destroyed, another is developed, which explains the cause of many shoots issuing from one seed. No less than 21,109 shoots have been produced by division from one grain of wheat, all of which have produced ears of corn. In this point of view wheat is a branching plant, the branches proceeding from the base of the culm.—*(Edin. Lit. Gazette.)*

HOSPITAL REPORTS.

Guy's, Aug. 8.

Operations by Sir Astley Cooper.—Case of lithotomy—removal of cancerous lip—and the contents of an immense chronic abscess on the left shoulder of a male patient —discharged.

A curious case of spina bifida was examined by Sir Astley.—The patient a male, about 28 years of age, comes from Yawling—states that he was born with it, and that it has continued ever since to discharge a purulent matter. Its seat is the root of the spine; and on pressing on the tumour the finger falls into the hollow of the sacrum.

As the patient will not be admitted until Wednesday next, we are not yet acquainted with the mode of treatment that will be adopted, although it may easily be conjectured that its communication with the spinal canal will be attempted to be obliterated by the adhesive process, &c.

MARRIED.

On the 2d of August, at the New Church, St. Pancras, Alexander Delisser, Esq Surgeon, Judd Street, Brunswick Square, to Deborah, eldest daughter of the late John Crawford, Esq.

OBITUARY.

Of the yellow fever, on board of His Majesty's ship Barm, of the Coast of Africa, aged 19, Mr. Henry Roxburgh, son of the late Dr. Roxburgh.

At Hampstead, on the 30th ultimo, aged one year and nine months, George Wood, son of I. R. Wood, Esq. Surgeon.

On the 6th inst. Francis Travers, M.D. late of Newark, Notts, in the 38th year of his age.

TO CORRESPONDENTS.

Several communications came to hand during the last and preceding weeks, which will be acknowledged in our next Number.

No. 1 of the MEDICO-CHIRURGICAL and PHILOSOPHICAL MAGAZINE. *The second edition of this number of our Magazine is now in the press, and will be ready for delivery in the course of the ensuing week; with the first vol. containing four parts, each part six numbers.*

London:

Printed by E. JUSTINS, 41, *Brick Lane, Spitalfields.*

Published by COX and SON, St. Thomas's Street, and 39, High Street, Southwark. Sold also by Sherwood, Neely, and Jones, Paternoster Row; Simpkin and Marshall, Stationers' Court; John Cox, Berner's Street, Oxford Street; Callow and Wilson, Gerrard Street, Soho; W. Stewart, South Bridge Street, Edinburgh; Hodges and M'Arthur, Dublin; &c. &c.

THE WEEKLY

MEDICO-CHIRURGICAL & PHILOSOPHICAL MAGAZINE.

No. XXVIII.] SATURDAY, AUGUST 16, 1823. [*Price 4d.*

" FLORIFERIS, UT APES, IN SALTIBUS OMNIA LIBANT
OMNIA NOS, ITIDEM, DEPASCIMUR AUREA DICTA."

BIOGRAPHICAL MEMOIR OF THE LATE JOHN HUNTER.

(Continued from page 34.)

Mr. Hunter's return to England, &c.

AFTER the peace of 1763, Mr. Hunter returned to England, having, as he has been heard to say, been long enough absent to be satisfied how preferable it is to all other countries. By his absence he had lost the few professional connexions he had formed at that early age, and the tie between his brother and himself was not likely to be renewed. Mr. Hewson had now supplied his place in the dissecting room, and at the theatre. Though it might be unfair to compare the two men in other respects, yet as lecturers, neither had any great claims to superiority.

Mr. Hunter, therefore, had now nothing to depend on but his half-pay. Well, indeed, could he then say with Simonides, *omnia mecum porto*. It is true that the army will always furnish some useful connexions to prudent men. Dissipation is not a necessary part of the military character; and even in circles where it is most prevalent, there are always a discriminating few, whose opinions will have a proper influence over the rest. It was impossible that these should forget Mr. Hunter's unwearied diligence, or his sagacious observations, or that thirst after knowledge, which evinced itself even in the hurry of a campaign, and during the irksomeness of a siege: add to this, Mr. Hunter's manners were extremely companionable. His wit, or more properly his archness, was extremely well directed, and the slowness of his articulation enabled him to point and correct it almost as it was uttered. Such a character, when it relaxes into broad conviviality, is peculiarly grateful to the gay and festive. It seems to furnish an apology for its own frivolity, and to supply new materials in a society which otherwise so soon becomes vapid.

Thus we view Mr. Hunter at a most important period, in his 36th year, arriving fresh in this great metropolis, and under the necessity of beginning life anew. It is truly interesting to see the manner in which two different writers describe these events.

" On his return to England (says Sir Everard Home) he settled in London; where not finding the emoluments from his half-pay and private practice sufficient to support him, he taught practical anatomy and operative surgery for several winters. He returned also with unabated ardour to comparative anatomy; and, as his experiments could not be carried on in a large town, he purchased for that purpose, about two miles from London, a piece of ground near Brompton, at a place called Earl's Court, on which he built a house.

" In the course of his enquiries, this excellent anatomist ascertained the changes which animal and vegetable substances undergo in the stomach, when acted on by the gastric juice; he discovered, by means of feeding young animals with madder (which tinges growing bones red) the mode in which a bone retains its

shape during its growth:* and explained the process of exfoliation, by which a dead piece of bone is separated from the living.

"His fondness for animals made him keep several of different kinds in his house; which, by attention, he rendered familiar with him, and amused himself by observing their peculiar habits and instincts: but this familiarity was attended with considerable risk, and sometimes led him into situations of danger, of which the following is a remarkable instance.

"Two leopards, which were kept chained in an out-house, had broken from their confinement, and got into the yard among some dogs, which they immediately attacked; the howling thus produced, alarmed the whole neighbourhood. Mr. Hunter ran into the yard to see what was the matter, and found one of them getting up the wall to make his escape, the other surrounded by the dogs; he immediately laid hold of them both, and carried them back to their den. But as soon as they were secured, and he had time to reflect upon the risk of his own situation, he became so much agitated that he was in danger of fainting. The following is the account given by another biographer of Mr. Hunter's situation on his return to England.

"On his return to England, and at the close of the war, he took a house in Golden Square, and found himself, in point of fortune, better than nothing by his half-pay; that enabled him to pay his house rent, and some other necessaries, requisite even for those who set down in practice waiting for patients;—and here commences his first career as a London surgeon.

"What happened to John Hunter, happens to every surgeon in the beginning; there was not employment enough furnished by the practical art, to fill up the active hours of the day. But his resources were in an extraordinary degree advantageous over most young surgeons under the same predicaments for want of patients; he experienced no lassitude; he had furnished his mind with the means of employment; and, to say the truth, he was of an uncommon turn to industry."

From these two writers, it is not difficult to conceive the situation of Mr. Hunter, unenvied, because scarcely known; anxious only for the acquisition of science; and finding his half-pay, with the little practice his connexions supplied, quite sufficient for his wants.

Whilst Mr. Hunter was absent, Dr. H. published his "Medical Commentaries," containing three papers of Mr. Hunter's before alluded to. The paper on the absorption by the veins has the following passage:—"at this time, my brother was deeply engaged in making experiments on living animals, and in prosecuting comparative anatomy. It is well known that I speak with moderation when I say so. He took the subject of absorption into his consideration, and from all his observations was inclined to believe, that in the human body there was one, and but one system of vessels for absorption. He knew so well that many things had been asserted by one person after another which were not true; that so many mistakes had been made from inattention, so many errors from other causes, that he could easily suppose the veins might not absorb, after all the demonstration that had been given

* Perhaps there is some inaccuracy here in Sir Everard Home. Mr. Hunter showed the manner in which the bones retain their shape by burying two small leaden shots, at a measured distance, in a pig's leg. Examining the bone when the animal had considerably grown, he found that the shots remained at their original distance from each other. By this he proved that the elongation of the bone must depend on the apposition of new matter at the extremities, and not by an elongation of every part.

of the fact; and therefore, was determined to see how far this point could be cleared up by plain experiments and observations. With that intent he made the following experiments in my presence, and in the presence of a number of gentlemen, who, all of us assisted him, and made our observations in what passed before us."

Though the publication of such papers must have kept Mr. Hunter's name alive among the philosophic part of the public; yet, on his return, it is easy to conceive the obscurity of his condition, as far as relates to the town at large. "The practice of surgery (says the biographer last alluded to) at that time, and for long after, afforded no opening for him:—Hawkins, Bromfield, Sharpe, and Pott, embraced almost the whole family of practice; whilst Adair and Tomkins carried from him the chief of the practice derived from the army."—Thus overlooked by the public, much to the honour of the Royal Society, he was at this early period elected a Fellow, and in that title actually preceded his brother, who was ten years older, and had been known in the metropolis ten years earlier: during which the reputation of William was hourly increasing, whilst John was scarcely known but as his brother.

(*To be continued.*)

DR. GALL.

Of Alienations which incline the Patients to attempt the life of their neighbours, their children, or other persons innocent with respect to them.

It remains for me now to speak of a most afflicting phenomenon, and which has considerable relation with the propensity to simple suicide. This phenomenon consists in as much that the individual who wishes to terminate his own life, begins by destroying those who are most dear to him. A shoemaker at Strasbourg killed his wife and three children, and would also have killed the fourth, had it not been taken out of his way. After having committed this monstrous act, he wounded himself in the stomach, but the blow not proving mortal, he withdrew the knife and stabbed himself through the heart. This man had the reputation of being a mild and loyal man—a good father and an excellent husband. At Leopold in Gallicia, a person named K*** killed his wife whom he loved most tenderly, he then fired a pistol at himself; but he missed his aim. During the time the door was being broke open, he fired a second time and shot himself. His conduct had always been irreproachable, and all that can be known, is, that he was not satisfied with his place, and that he thought he deserved a better. At Hamburg, M*** a respectable teacher, killed his wife and five children, and spared two others which were confided to his care. A similar event took place at Amsterdam; and many other facts of this description have come to our knowledge.

What will my readers think on hearing of these atrocities? The greater number of them will say that the torment of an insupportable existence and the most bitter remorse alone could produce so frightful an action, and they will treat as infernal egotism the crime of an individual who snatches the life from his own family because he is tired of living himself. The judgment of a physician-philosopher will be very different. He only sees in these deplorable acts, the symptoms of the most terrible disease the most worthy of pity. Whatever there may be contrary to nature in the actions of these unfortunate creatures ought to fix the attention of whoever occupies himself with the knowledge of mankind. I defy any one to conceive that it is possible for the husband who loves his wife, or the father who is fond of his children, in the right use of his reason, to become their assassin. Add to this, that which always takes place, these

kind of murderers have not their own interest in view, but immediately after the act, they destroy or give themselves up to justice and demand death. How does it happen that hitherto mental alienation has never been recognised in these actions?

Among the principal symptoms of this disease, the greatest disorder is manifested in the head and in the abdominal viscera. Eructations, flatulencies, strange appetites, irregular evacuations, deranged menstruation and hœmorrhoids are observed. The complexion changes and becomes of a yellowish green earthy colour, particularly about the nose and mouth, so that the face loses all its lustre. The eyes are dull, heavy and oppressed—the white of the eye assumes a leaden colour. In other individuals, on the contrary, the face is more flushed, animated and cheerful; their eyes are inflamed—some of these patients retain their strength and embonpoint; others become lean and emaciated, and daily feel weakened and more oppressed. The whole surface of the skin is sometimes deprived of feeling, and they complain of a numbness in their hands and feet—but more frequently the sensibility of the hands and feet is augmented—they experience throughout their whole body, or only in certain places, particularly in the thighs and feet, a burning heat, as if it was produced by red hot coals. When the disease is at its greatest height, this heat produces on the patient the effect of a burning blast, and disappears in the same manner; it is felt in the intestines, or else it passes from one place to another. The greater number of patients are then oppressed, pusillanimous, dull and fearful; to that degree that very robust men tremble like children. Some of them refuse or are very indifferent about communicating their feelings to others. This apparent carelessness, this apathy, this perfidious silence often characterises the most dangerous cases. Some of them teaze those who are around with playing them little tricks; they see everywhere nothing but misfortune and wickedness, and even when every thing that concerns them offers the image of prosperity, they are despairing about their children being menaced by hunger and misery. Some imagine that everybody despises and persecutes them—they are always complaining of being neglected—and that justice is not done to them. Sometimes all the symptoms suddenly disappear, but they equally as suddenly return. The melancholy and pusillanimity daily increases. The greater number of such patients feel a permanent and acute pain proceeding from the root of the nose to the middle of the inferior part of the forehead;—the seat of this pain is sometimes on the crown of the head;—they often likewise complain of an intolerable tension in the region of the forehead, and of a painful construction in the abdomen, which feels as if it was girt with a hoop. To these symptoms are frequently added suffocating convulsive fits, frightful anxiety, despair, an involuntary propensity or secret impulsion to lay violent hands on themselves. In a word, this disease, independent of the symptoms we have indicated, still present all those which commonly accompany the propensity to suicide. I shall treat elsewhere in detail of the propensity to suicide, which I will prove proceeds from a real disease. That which I am now speaking of, is only a frightful variety of the same disorder.

(This article to be concluded in our next Number.)

From Paris and Fonblanque's Med. Juris.

(Continued from p. 39.)

Of real and apparent death, as connected with Homicide.—If life, say the authors, be defined, that power by which organized beings are

enabled to resist the physical and chemical operations of surrounding agents, it follows that death must be marked by the occurrence of the phenomena to which such operations, no longer controlled or suspended, will necessarily give rise; hence, putrefaction has been considered by many as the only certain sign of dissolution. The uncertainty of the period, however, at which this change occurs, has rendered it necessary to seek for other signs, which though less positive, are more easy of employment. They consist in the symptoms which indicate the cessation or quiescence of the functions which in fact constitute the whole of what we know of the succession of phenomena to which we apply the term life. The principal of those signs are the cessation of respiration, pulsation, sensation, and motion, together with the pale and livid hue of the body; the coldness of the surface, and stiffness of the limbs. To the skilful medical practitioner, we apprehend such signs must ever be unequivocal; but we are not prepared to say that a common observer may not sometimes be deceived by them. Many well established cases are known in which persons supposed to be dead have shewn signs of life, and even occasionally recovered. Of all the functions, the most indispensable is that of respiration, and the authors do not hesitate to assert, that it is physiologically impossible for a human being to remain more than a few minutes in such a state, as not to betray some signs by which a medical observer can at once recognize the existence of vitality. However slow and feeble respiration may become by disease, it must always be perceptible, provided the naked breast and belly be exposed, from the appearance of the alternate elevation and depression of the abdomen, and of the ribs with the sternum. The absence of pulsation, coldness of the surface, and stiffness of the limbs, are signs of much less value, as the presence of the whole of them is perfectly compatible with the existence of life.

Causes and phenomena of sudden Death.—Bichât proved that the occurrence of death in all cases was to be explained by the cessation of the functions of the brain, lungs, or heart, although it is difficult to determine which of these organs, in certain cases, is the first to fail in its office. When death is the consequence of interruption of respiration, Bichât shewed that this was, first, because the black blood which enters the coronary vessels, without being aerated in its passage through the lungs, is incompetent to support the powers of the heart, which consequently soon becomes inadequate to sustain the circulation; and secondly, because in the same manner black, instead of scarlet blood, is sent (as long as the heart acts) to the brain, the functions of which it deranges, and ultimately destroys. In death, by the cessation of the functions of the brain, the effects on the rest of the system may be produced through the medium either of the heart or of the lungs; through that of the heart, as in the case of injuries of the brain and of other parts of the nervous system, which, as was first explained by that able physiologist, Dr. W. Philip, may have the effect of immediately and permanently stopping the circulation; or, secondly, through the medium of the lungs, as when the injury of the brain is of such a nature, or in such a part, as to destroy or nullify the act of volition, by which the respiratory muscles are set in motion, and thus hindering the aeration of the blood in its passage through the lungs. In the last place, death from the primary cessation of the action of the heart, ensues generally because the other organs are unable to continue their functions when deprived of the supply of blood necessary for that pur-

pose. These reasonings apply only to animals of the higher classes, and particularly when full grown. In reptiles and fishes, and in the young of mammiferous animals, this reciprocal influence and dependence of the three great centres of vital action is much less marked: the operations of any one of them may be interrupted without necessarily or immediately causing a suspension of the functions of the other two. As a physiological principle, we may state that the lower we descend in the scale of animals, and the earlier the period at which we observe the more perfect ones, the less is the mutual connexion and influence of the different organs, and the more nearly do individual parts approach to the possibility of existing independent of the rest.

Suffocation.—This term, in its popular sense, may be defined the destruction of life by the suspension of respiration, occasioned by external violence; and includes death by drowning, hanging, strangling, smothering, and noxious inhalation.

In drowning there is first a deep expiration, by which bubbles of air are expelled from the lungs; there is then an ineffectual effort to inspire, there being no air which can be received into the lungs, and a spasm of the muscles of the glottis seems to forbid the admission of any considerable quantity of water into the trachea. The attempts to breathe are repeated several times, and at each attempt a small portion of air is expelled from the mouth and nostrils, until the lungs are almost emptied; the animal then becomes insensible, and convulsive actions of the voluntary muscles mark the instant when the brain begins to suffer from the influx of black blood. The body of a person killed by drowning presents the following appearances: the surface is remarkably cold and pallid; the eyes half open, the pupils dilated; the tongue is pushed forward to the edges of the lips, and sometimes wounded; and the mouth and nostrils are covered with foam. The quantity of water which enters the lungs is usually very small, from the convulsive action of the muscles of the glottis; were it to appear in any considerable quantity, the inference would be that it had passed in after death. As a general rule, it may be stated that no newly drowned body floats; putrefaction is necessary for that purpose.

In death by hanging, life is destroyed generally by suffocation, but sometimes by the injury to other parts before this cause has had time to operate completely; such, for instance, is the case when, by the violence of the fall, the cervical vertebræ are dislocated, and the spinal cord injured. The appearances after death by hanging are a dark colour of the lips, nose, &c.; distortion of the countenance; protrusion of the eyes and of the tongue; discharge of blood from the ears; evacuation of urine, fæces, and even semen.

After strangulation, the appearances observed internally will be the same as in suffocation from other causes, though, perhaps, not so conclusive, because, in consequence of the greater resistance of the sufferer, respiration and circulation may continue in some measure for a longer time than in hanging and drowning: where a person has been killed by manual strangulation, marks about the neck will probably be evident, and the discolouration will correspond to the fingers and nails.

Death by smothering is precisely the same as the preceding in the effects produced, differing only in the cause which remotely induces it. The same may be said of the inhalation of many kinds of gas, which act by depriving the lungs of their requisite supply of oxygen; others, on the contrary, independent of this operation, are absolutely noxious, and act as poisons, among which they must be classed.

Death by cold.—This subject has been investigated by Dr. Chossât, and by Mr. Brodie, who communicated his manuscript notes on this and other kinds of death to Dr. Paris. The former shewed, that in dogs death took place in the cold bath, commonly at 26° cent. (79° Fah.) though sometimes not until 17° cent. (63° Fah.) According to Mr. Brodie, cold lessens the irritability, and impairs the functions of the whole nervous system; it impairs the contractile powers of the muscles; it causes contraction of the capillaries, lessens the superficial circulation, and stops the cutaneous secretion; it probably destroys the principal of vitality equally in every part, and does not exclusively disturb the functions of any particular organ.

Our limits do not permit us to notice the succeeding subjects, namely, death by heat, lightning, starvation, &c. and the application of these physiological facts to the general treatment of asphyxia; and we think it the less important, as many of them, though highly important, are but very indirectly connected with the subjects of the treatise.

Of Murder; and first, of wounds.—The common division of wounds may be adopted, viz. incised wounds, punctures, bruises, lacerations, and gun-shot wounds; wounds may be, 1st. Absolutely mortal: 2d. Dangerous; 3d. Accidentally mortal; 4th. Not mortal. Every practitioner, however, must be aware that death will occasionally supervene on the slightest injury; and at other times, that the patient recovers in spite of the most serious and extensive mischief. In this country, the necessity for a nice discrimination of the degree of danger of any injury is almost done away with, by the Act, called "the Ellenborough Act," which makes the offence of wounding, with intent to kill, capital. In his prognosis of the event of wounds and other injuries, it is unnecessary to say that the practitioner must be guided by the surgical principles which regulate his conduct in other instances.

(*To be continued.*)

Dr. Heinrich Spitta's Surgical Remarks.*

Dr. Spitta, having had an opportunity of witnessing the practice of M. Dupuytren, whom he justly considers as the first surgeon in France, thought that it might be useful to detail the histories of some of the cases which came under his observation. He has confined himself in the present communication, to the subjects of aneurism and hernia, and relates some cases which present many points of interest.

A man, aged 35, had served as a soldier during 14 years of the late war, and during that time once contracted the venereal disease, the only one which he had suffered since his infancy. For four months he had felt a stiffness and difficulty in the motion of the knee, the cause of which he discovered to be a swelling as large as a bean, but daily increasing in size. In January, 1821, he presented himself before the Central Administration of Hospitals, and was sent into the Hotel-Dieu.

The left leg and thigh were swelled from the hip downwards. The subcutaneous veins were much distended; several arteries, as large as the radial, could be felt pulsating about the internal condyle, and the ham was occupied by a considerable well defined swelling. The pulsation in it was very forcible and isochronous with that at the wrist, but ceased completely on the compression of the artery above it.

As the compression of the artery above an aneurism has occasionally effected a cure, as it is less hazardous than an operation, and even when it

* Chirurgische Beobachtungen aus dem Hotel-Dieu du Paris, mitgelheit von Dr. Heinrich Spitta. Hanover, 1822.

fails, favours the subsequent cure with the ligature by causing a gradual enlargement of anastomosing vessels, M. Dupuytren resolved on trying the plan, although the patient declared himself willing to submit to any treatment. With this view he placed his compressorium (which consists in a semicircular spring with a pad) at the upper part of the thigh, the patient being directed to favour the circulation by moderate friction.

On the following morning, January 18, he earnestly prayed for the operation; since the application of the pressure he had been tormented with a dull, disagreeable sensation, not amounting to pain, which he compared to the creeping of ants, and which had prevented him from sleeping. The thigh was cold, heavy, and insensible. As no benefit could be expected from this mode of treatment, M. D. resolved on the operation. He accordingly made an incision at the inner edge of the sartorius, and exposed the sheath of the vessels. Having carefully opened it, and separated the vein and nerve from the artery by means of the knife handle, he passed a director under the latter vessel, and by that means carried a probe under it with two round ligatures, of which only one was tied, and the other left in the upper angle of the wound as a ligature of reserve. During the last five years, M. Dupuytren has operated for aneurism twelve or fifteen times, without the occurrence of secondary hemorrhage, and consequently, without being obliged to tighten the ligature of reserve. During the operation, but little blood was lost; the swelling ceased to pulsate, and the temperature of the limb sunk a little.

The patient slept soundly during the night; the thigh was moveable, warm, and sensible. Every thing proceeded favourable until January 21, when a pulsation became again perceptible in the tumour, and could be traced in the course of the artery to the vicinity of the ligature, which was quite firm and undisturbed: the pulsation seemed to be caused by large collateral vessels. For fear that the ligature might be detached by it, the compressorium was again placed above the wound, and the patient instructed to tighten it in case of accident. The wound was filled with a thin reddish matter—according to Dr. Spitta, a never-failing omen of hemorrhage: the quantity increased, so that on the 24th the dressings appeared as though stained with blood. The aneurismal swelling increased in size, and the pulsation became stronger, extending even to the upper angle of the wound.

The compressorium was tightened as much as the patient could bear, and two assistants left in attendance on him. The hemorrhage might be expected to take place either from the upper end of the artery, or from the lower, by means of the communication of branches above, with others below the ligature; or lastly, at the same time from both upper and lower ends of the artery. The patient was kept perfectly quiet, and placed on a very low diet. He remained without alteration for some days.

About five in the morning of February 1st, he felt himself wetted by a very warm fluid, and soon found that it was blood. The surgeon in attendance found the dressings and clothes quite soaked with blood. The bleeding ceased when the wound was opened; the dressings were changed, and two assistants left at the bedside. At noon, a second hemorrhage took place, which the patient stopped with the compressorium. The artery was seen and felt pulsating very strongly in the upper angle of the wound, whence the bleeding came; the ligature was unmoved. On attempting to tighten the ligature of reserve, it was found to be so overgrown by granulations as to be quite useless. Such being the case, M. D. resolved

on tying the artery again, and even thought on tying the internal iliac, on the supposition that the bleeding might proceed from the lower end of the artery by means of the anastomosing branches of the profunda. However this might be, he tied the femoral a second time about three fingers breadth above the wound, and near to the origin of the profunda. This operation stopped the hemorrhage directly.

On the following morning, at the same hour that the first bleeding took place, a third hemorrhage occurred in spite of the new ligature, which in a few minutes soaked through the dressings and bed clothes. This evidently came from the under end of the artery, and was immediately stopped by pressure below the lower angle of the wound. The compressorium was fixed here, and the lower end of the wound left uncovered, in order to be abie to detect the first appearance of bleeding. The third of February passed quietly: the patient, though extremely weak, began to take courage, and to speak again, which fear and debility had prevented him from doing on the two last days. At midnight hemorrhage again occurred, and it became necessary to tighten the compressorium still more, although, from the debilitated state of the patient, the point on which the pressure was made was almost gangrenous. This answered the intention; the bleeding did not return; the patient's strength and appetite were improved on the next day. On Feb. 5, the dressings were changed, and the pressure of the instrument relaxed, though not before it had produced a tolerably large slough. On the 6th, the ligature in the first wound came away, and at the end of a few days, that of the second. The swelling diminished in size; the slough, which extended to a considerable depth, separated after a little time, and about the middle of May the man left the hospital perfectly recovered.

In the next case, a man aged 41, and slightly lame from the remains of a former complaint in the hip, slipt in walking, and felt immediately a pain in the calf of the leg, followed by a swelling in the ham, which pulsated and impeded the motion of the joint. Jan. 27, 1821, about six weeks after its appearance, it was larger than the fist, filling the ham, extending to the middle of the calf, and pulsating throughout; hence, probably the great branches of the popliteal artery, viz. the peroneal, anterior, and posterior tibial were included in the disease. The operation was performed as in the other case, with ease and little loss of blood. At the time of the operation, a slight cough was remarked: at the evening visit of the same day, M. Dupuytren remarked the animated appearance of the patient, with the unusual vehemence of his expressions of gratitude, and gave instructions accordingly to the pupil in attendance. The pulse was frequent and rather hard. The state of the patient betrayed itself by a degree of restlessness which soon amounted to delirium. All these symptoms vanished after blood-letting, as if by magic; a tranquil night followed, and the patient awoke in the morning without any appearance of disease. The limb was sensible and warm, the swelling less by one half, and without pulsation.

On the following day, the patient complained of pain in the chest and arm, which yielded to a second bleeding, and the application of leeches. From this time every thing proceeded well, and he left the Hotel-Dieu in the middle of February.

An ostler was admitted into the Hotel-Dieu on account of an aneurism in the ham. Four months previously, he had remarked a small swelling which pulsated, and had increased so as to extend to the inner and even the front part of the thigh, being six inches in length. In this respect it differed from the sac in the other two cases, one of them being confined

to the ham, and the other extending downwards on the leg.

As the patient had a plethoric appearance, some blood was taken from him, in consequence of which the size of the swelling diminished by one half, but returned in a few hours. On the next day, Feb. 28, the operation was performed, M. D. having previously examined the course of the artery, a precaution which should never be omitted, from the possibility of the existence of more than one aneurism. In a case of that description, M. Dupuytren was about to perform the Hunterian operation, when he discovered a second aneurism at a considerable height above the popliteal one. In the present instance, the extension of the sac upwards rendered it necessary to make the incision at the edge of the sartorius high up. When the muscle was thrust aside, the artery was exposed with its vein and nerve: it was carefully separated from them, and a probe and ligature passed under it; the ligature of reserve was omitted. When the ligature was tightened the patient complained of pain, a circumstance which Dr. Spitta has remarked in almost every case, even though the nerves were most carefully separated. The pulsation immediately ceased; every thing proceeded favourably; the ligature was speedily detached, and the patient soon enabled to leave the hospital.

(*To be continued.*)

OMBONI ON CLINICAL MIDWIFERY.

(Continued from page 42.)

The fourth case is the most important, for in it the Cæsarean operation was performed without success. The patient was 30, strong, short, pregnant for the first time, and without any striking deformity of the spine or lower extremities, although a close inspection shewed that the left hip projected, and that the left ilium was a few lines lower than the right, which produced a degree of claudication. The antero-posterior diameter of the pelvis, ascertained by the pelvimeter of Baudelocque, was about three inches and four lines, allowing three inches for the base of the sacrum, pubes and mons veneris. The right diagonal, by the method of Gardieu, was natural, that is, about four and a half inches, the left wanted some lines. Examination by the vagina shewed nothing extraordinary. On the evening of the 7th April, the patient began to suffer wandering pains in the loins and abdomen, which continued with some degree of uterine action until the 10th; during this time nothing could be discovered by examination with the finger. A yellow gelatinous discharge then took place. The pains ceased for some hours, but returned at night with considerable uterine action; the os uteri could be felt high and contracted, although lax. In the morning of the 11th, the uterine contractions continuing with considerable pain, the os uteri was felt somewhat lower, but undilated, although apparently disposed to yield; the head could now be felt through the front part of the cervix; its position could not be distinguished. To moderate the pains and favour the dilatation of the cervix, blood was taken freely from the arm, and oily injections thrown into the vagina. Towards mid-day the head descended a little, but still remained at an extraordinary height, not having passed the upper aperture of the pelvis; the finger was with difficulty introduced into the os uteri, the head felt uncovered by the membranes, and a suture presenting, supposed to be the sagittal, the parietal bones overlapping considerably; this suture was directed from the sacrum to the pubes, rendering it probable that the head presented with its antero-posterior diameter in the sacro-pubic diameter of the pelvis; it was impossible to ascertain the situation of the occiput. Notwithstanding forcible uterine con-

tractions the cervix remained in the same state. The patient being restless, with headache and strong full pulse, the blood-letting was repeated. As in spite of the means employed, the long-continued labour and powerful uterine action, no ground had been gained at the end of the third day, it would have been dangerous to delay, and it became necessary to resort to some decisive expedient. An attempt was first made to dilate the orifice, so as to admit the application of the forceps, or even of the perforator; but after some hours trial it was given up, the dilatation effected being trifling, and the os uteri returning to its original state when the finger was withdrawn. Hence the application of the forceps or the perforator became impracticable. The incision of the orifice of the uterus would have been useless, the obstruction being situated above that point. The division of the symphysis pubis would have been indicated, if the head, instead of presenting in the sacro-pubic diameter (which was nearly an inch deficient), had been placed in a diagonal direction, as in that case the enlargement gained by synchondrotomy would have allowed of its depression and expulsion; but in the present case, the increase of the sacro-pubic diameter required to have been gained by the operation, would have been at least an inch; an increase which all the best modern professors consider impossible without a degree of injury to the pelvis, more dangerous than even the Cæsarian operation.

That operation was accordingly performed on the morning of April 13th, in presence of the other professors who had decided in its favour, by the section of the abdomen in the linea alba, the uterus being firmly fixed in the middle. When the fœtus was exposed, its position was as had been supposed, that is, its occipito-frontal diameter was in the superior aperture of the pelvis, with the occiput to the pubes, the body being slightly inclined to the left side. The head was not impacted, and was readily extracted. The child was full grown, but dead, and beginning to putrify. The placenta was immediately and easily removed, the uterus contracted, and the wound was closed with adhesive plaster only, a small space being left at the bottom, and a small tent introduced to facilitate the escape of discharges. After the operation the patient took some laudanum and slept some hours. At noon there were vomiting and meteorismus, which were calmed by emollient injections. In the evening, although the pulse was small and not very strong, it was thought proper to take ℈viij of blood, to prevent uterine inflammation, &c. every thing taken by the mouth being vomited. No advantage ensued, the vomiting, meteorismus, &c. continuing, although the pulse was weak and soft. Copious fetid uterine discharges were obtained by injections; the lochia escaped by the vagina, and the patient did not complain of pains in the abdomen or uterus. The vomiting and meteorismus continued in spite of all remedies, and the patient died on the morning of the 15th, about fifty hours after the operation.

(To be continued.)

Alteration of the anterior part of the Spinal Marrow, observed at the Hospital of Charenton. By M. Royer Collard.

Sprevale, born at Salmes, in Piedmont, April 18, 1760, on the half-pay of the fifth demi-brigrade of veterans, entered the hospital of Charenton October 17, 1806, and died March 3, 1823.

No information can be obtained as to the situation of this man before he entered the hospital: during the first ten years of his residence there he remained silent, idle, liking nothing but his bed, scarcely answering the

questions that were asked him; his walk was unsteady, his lower extremities were tottering, his upper ones were free, his pulse was feeble and slow. His apathy sometimes left him, and he became peevish and mischievous, endeavouring to strike all whom he met. The pelvian extremities becoming more and more feeble, he was at length unable to walk, and he remained about seven years with his thighs bent upon the pelvis, and the legs upon the thighs, "*without ever moving these parts, which nevertheless retained their sensibility.*" He still understood what was said to him, but his answers were not articulate; his intellectual faculties were almost annihilated, and he lived only to eat, drink, and occasionally fly into a rage. His excretions were made involuntarily. Three weeks before his death he was taken with a looseness, which became more and more abundant; his pulse was almost insensible; his emaciation was extreme.—The trochanters and the perineum soon became excoriated.

Appearance after death.—The skull hard as ivory, and three times as thick as when in a healthy state: the cerebral and spinal dura mater is thickened, but not injected; the arachnoid is healthy throughout.

The pia mater of the brain presents nothing remarkable; "that which covers the corpora olivaria and pyramidal eminences, as well as the anterior faces of the spinal marrow, is very dense, of a bluish colour, and marked with dots. This colouring is bounded on each side by the anterior roots of the spinal nerves and the dentated ligament; above, it insensibly diminishes on the developement of the cerebellum, on the upper edge of which no trace of it is seen; below, it finishes with the spinal marrow. This membrane being taken away, the olivarian and pyramidal bodies are found of a greyish colour, and as soft as pap: the softness continues, but gradually diminishes along the whole anterior part of the marrow, and almost through the whole thickness of the bundles of fibres which form it;" towards the encephalon it may be traced across the commissure of the cerebellum into the crura of the brain, the optic thalami, the striated bodies, and some of the cerebral convolutions, particularly towards the middle part of the right side. The anterior roots of the spinal nerves can also be distinguished on the fasciculi which give them origin, but they have not their accustomed consistency.

All the other parts of the brain, besides those which we have mentioned, are, as well as the cerebellum, in their natural state; but the commissure of the latter is more firm than ordinary, and affords a striking contrast with the softness of the neighbouring parts.

The posterior face of the spinal marrow, and the membrane which covers it, are sound. There is nothing to be remarked in the breast; a little serum is effused in the abdomen, and some light red spots exist on the peritoneum; the internal membrane of the stomach is bluish, dotted almost throughout its whole extension; that of the intestines presents some red spots.

The pelvian members cannot be extended, (thirty hours after the patient's decease the thoracic members became flaccid); after cutting the muscles which move them, they were rendered moveable. There is much synovia in all their articulations.

M. Magendie enquires, is not this case calculated to enlighten our views respecting the distinct properties of the anterior and posterior parts of the spinal cord? However, it should be added, that the movements of the arm in this case were partly preserved; the writer of the case says they were not, but M. Royer Collard informed M. Magendie, verbally, that they were. However, this last circumstance shows the necessity of a

farther examination of the anatomy of the spinal cord and of its vital phenomena. This part of the nervous system is much more complicated at its superior region than any where else, and we know nothing of the functions of the corpora olivaria, of the anterior and posterior pyramids, &c. M. M. is at present investigating these points.—*(Jour. de Phy. Avril* 1823.*)*

MELANGE.

Emetics useful in counteracting the inordinate effects of Mercury.

During the last autumn, Dr. R. Field, of Petersburg, Virginia, in treating one of his patients for a profuse hemorrhage of the bowels, brought on by the inordinate action of calomel, with his favourite prescription, consisting of opium, ipecacuanha, and sugar of lead, gave the remedy in rather large doses, and the stomach being extremely irritable, violent vomiting was excited. The patient, at the time, was labouring under a most profuse salivation, amounting even to sloughing of the mouth and fauces. The hemorrhage was soon suppressed, (an instance illustrative of the utility of vomiting in hemorrhage,) and with an almost simultaneous arrestation of the mercurial affection.

Having a mind always susceptible of improvement, and of unbounded zeal in his profession, Dr. Field determined to profit by the hint thus given, and was induced to make a farther trial of the remedy, in some other violent cases of salivation then under his care, and which had resisted the usual mode of treatment. The effects of the plan were not less beneficial than in the first instance.

Not long after this, I happened to be in Petersburg, and meeting with Dr. Field, he informed me of the decided advantage which he had derived from emetics, under such circumstances, and assured me that he had not been disappointed in a solitary instance, referring me to several other respectable practitioners of the town, who, he said, would bear ample testimony to the efficacy of the practice. I was then requested to inform my preceptor, who was once a pupil of Dr. Field, on my return to the country, of the circumstance, and which I accordingly did. Confiding in every thing coming from Dr. Field, my preceptor immediately made an extensive trial of the remedy, and, in a short time was enabled to corroborate all which had been previously said in favour of it.

On the whole, from what I have myself seen of the utility of emetics in arresting inordinate salivation, and the gangrene resulting from it, I think I am warranted in pronouncing the practice a most important medical improvement.—*(Extract from the Thesis of Dr. Haskins of Pensylvania.)*

A Solution of Opium in Nitric Acid, beneficial in Hectic Fever.

We have employed, says Dr. Harrison, a distinguished physician of Louisville, Kentucky, opium dissolved in nitric acid, with effects decidedly and eminently beneficial in hectic fever. One drachm of opium is dissolved in one ounce of nitric acid, in an open vessel, to allow the nitrous fumes, which are disengaged, to escape. According to the condition of the system, we give twenty, thirty, or forty drops, three times a day.

When it manifests an action too predominantly narcotic, we diminish the quantity of the opium. But a sufficient quantity of opium must be dissolved, so as to calm the hectic irritation, at the same time the accompanying acid imparts strength. We have witnessed one case of entire recovery with this combination when nitric acid alone, mercury to a ptyalism, opium, &c. were tried with little benefit. Even in cases, where the prospect was clouded by the shadows of death, life was evidently pro-

longed, and the passage to the grave rendered more smooth and gentle, by its administration.—*(Philad. Jour. No. 11.)*

Shock of an Earthquake felt at Sea.

The following account of a curious phenomenon was communicated to us by our friend Mr. Parson, who was at the time surgeon of the ship in question:—

On Sunday, the 10th of Feb. 1823, at ten minutes past one p. m., the honourable East India Company's ship Winchelsea, on her passage from Bengal to England, when in latitude 52 min. N. long. 85. 33. E., experienced a shock similar to that of an earthquake. Every individual on board was alarmed by a tremulous motion of the vessel, which gave a sensation as if she were passing over a coral rock; at the same time a loud rumbling noise was heard, similar to that communicated by the rolling of a butt along the deck. This agitation and noise continued at least for two or three minutes. The captain, being at the time in the round-house, looked out at the stern windows, but there was no appearance of any shoal; this he must have seen had any existed, as the water was remarkably clear and smooth, and the ship not going more than two knots an hour; indeed, she was considered to be out of soundings at the time. One singular circumstance to be mentioned is, that during the continuance of this phenomenon, there was no perceptible commotion in the sea. The Winchelsea was at this time some hundred miles from any land. This remarkable phenomenon cannot be accounted for in any other manner than by referring it to some volcanic eruption in one of the islands eastward of the bay of Bengal.—*(Med. Repos.)*

Dr. Helenus Scott on the Guinea Worm.

Dr. Scott has given a very interesting account of the formidable dracunculus of the tropics. He says that it breeds in the moist earth during the rainy season, and that a medical friend of his saw a native gardener dig up a number of these worms on the coast of Malabar, of which he collected a number, and preserved them in spirits. There could be no doubt of the identity of the animal with that found in the human body. It is probable that the eggs or young of the Guinea Worm live in water, or moist places; and hence the Indians, who walk bare-footed, are much infested with them. The cellular membrane under the cutis is its proper nidus; but it often goes deep into the cellular substance between the muscles, as in the socket of the eye, the mouth, the cheeks, or below the tongue. The first symptom of it is a small blister, which, when broken or irritated, produces intolerable itching over the whole body, so as almost to drive the person mad. Dr. Scott, in this case, describes his own feelings while suffering under this intolerable itch. When the animal has been partly extracted, it has not the power of retracting itself, though it has of advancing—a circumstance of the greatest importance in practice; for if it is wound, as is often done, round a quill, and secured, it irritates the animal; and as it seems to have the power of communicating its disagreeable feelings to the patient, it is often productive of troublesome consequences. It is elastic, but it ought never to be stretched. The native surgeons try to trace its convolutions under the skin, and, cutting down upon it, are often able to extract it at once, if in a soft part; but when it is on the hands or feet, and warped round a bone, this is impossible, and its extraction may be tedious, and even dangerous. It is best to draw out as much of it as will come easily, and cut it all off but about a quarter of an inch, over which a poultice may be put. This does not kill it, but it sometimes dies, and produces

inflammation and abscess in the part. It will, of its own accord, come out slowly, like the hour hand of a watch. When extracted, it soon becomes stiff, and dies.

Carbonate of Magnesia and Iron, &c.

Prof. Walmstadt, of Upsal, has analysed carbonate of magnesia from Hartz containing the carbonates of iron and manganese. The texture of this mineral is foliated, and its primary form is a rhomboid of 108° 15′, differing of course still more from calcareous spar than rhomb spar. The results of the analysis were:

Carbonate of magnesia.....	84·36
Carbonate of iron.....	10·02
Carbonate of manganese.....	3·19
Silica	0·30
Water.....	0·51
Loss, and a substance destructible by fire.....	1·62
	100·00

Mr. Miller's Anatomy of Comatula.

The scapulæ of the genus Comatula resemble those of the Pentacrinus caput medusæ, but are much more angularly pointed at their superior surface, and are also tied together laterally by an integument. From each of the scapulæ in the different species proceed either two arm-like fingers, or two arms, each of the latter formed of a common and cuneiform joint, from which, on one side, the first finger, and on the other, a continuation of the arm sets off, which again, by the intervention of cuneiform joints, divides into two or more fingers, and then forms a hand like the other Crinoidea. Each joint of the arms and fingers sends off, from alternate sides, a tentaculum, formed of many articulated small joints. An integument extends over the abdominal cavity, the groove in the arms, fingers, and tentacula, and is like that in the Pentacrinus, also protected by numerous minute calcareous plates.—*(Miller's Crinoidea.)*

Half-yearly Medical Report of the Hospital for the Casual Small-Pox and Vaccination, at St. Pancras.

The proceedings of this establishment during the last six months have not been marked by any circumstances of peculiar interest; yet they have, nevertheless, been silently working a great deal of public benefit; and while it must be satisfactory to the governors to know that their charity has been effectively applied, it may not be unprofitable to the public in general to have their attention re-awakened to the only form of human suffering which mankind universally anticipates.

Eighty-four patients have been admitted into the Small-Pox Hospital, between the 19th of December, 1822, and the present date; 49 have had the disease in a severe and dangerous degree, and of them 23 have died. Nine remain under treatment.

Among the 35 persons who passed through the complaint in a mild form, 24 had been previously vaccinated; and the influence of this process, in stripping the small-pox of its most formidable features, was never more strikingly manifest than in the period now under review. None of them died. While the natural small-pox indeed was raging with a degree of violence which hardly admitted of controul by medical aid, those who had been vaccinated remained in comparative security, experiencing no other inconveniences than what result from the visitation of casual disease.

Strongly impressed, by the result of another half-year's experience, with a sense of the benefits of vaccination, your Physician is gratified by having to report that in the same period 1605 persons have been vaccinated; and that with the full knowledge of the occasional failure of this protection, the public voice is still decisively raised in its favour. Your Physician cannot, in this place, avoid an allusion to the conduct of some persons, heretofore strenuous advocates of vaccination, who have recently shown a disposition to desert it, because it does not fulfil *all* the expectations which a benevolent, but too sanguine feeling had once indulged. It behoves such persons (before they recur to inoculation, which experience has proved to be *so* pregnant with danger to the *public* welfare) seriously to consider, whether the failures of vaccination may not, in some degree, be attributed to causes under our control; and whether the alternative proposed may not, even as far as the individual himself is concerned, be as dangerous as the evil to be avoided. Your Physician, judging from the experience acquired in this establishment, is disposed to reply to

both questions in a manner favourable to the cause of vaccination. He is convinced that a stricter attention than what once was bestowed on the process of vaccination, will assist materially in reducing the number of failures; and he is further of opinion, that the inoculated small-pox is equal in point of severity to the same disease, as it occurs casually subsequent to vaccination.

Your Physician, therefore, in conclusion, again presses on the attention of the governors the importance of affording every encouragement to vaccination.

GEORGE GREGORY, M.D.

HOSPITAL REPORTS.

St. George's.

August 9.—Mr. Brodie reduced a dislocation, of three weeks standing, of the os brachii into the axilla. The patient, a stout fat female. The warm bath, and tartar emetic in nauseating doses, were exhibited. The reduction was accomplished in about five minutes.

The case of extra-uterine gestation noticed in a preceding number. The patient (Elizabeth Atterwell) is almost well, the whole of the bones of the fœtus having come away. The wound is healing, and she expects to be discharged from the hospital very shortly. She is very lively, and her strength daily increases.

Westminster.

August 9.—Sir Anthony Carlisle amputated two toes. Performed also the operation for artificial anus in an old subject, ætat. 72.

An operation for artificial urethra was likewise performed by Dr. Bayton. Subject, ætat 7.

A tumour on the side of the neck was opened, which discharged about 3 ounces of a dark, grumous kind of fluid.

St. Bartholomew's.

August 9.—The operation for stone in the bladder, on a boy ten years of age, was performed, and the calculus extracted by Mr. Lawrence.

St. Thomas's.

August 15.—Two operations for stone. One performed by Mr. Travers; the other by Mr. Tyrrell. Both young subjects: one about seven years of age; the other, between three and four.

Guy's.

Case of lithotomy in a child about three years of age. Operation dexterously and expeditiously performed by Mr. Aston Key, and a stone of unusually large dimensions extracted.

Mr. Key on this occasion operated, for the first time, with a new instrument, suggested by himself—and it was no less agreeable to find that the success answered, in every respect, the expectation. This instrument, from what we were enabled to judge of it during the operation, appears to be something of the scalpel-formed kind, but with a much longer blade and rather peculiarly pointed. The staff is also rather new, being nearly straight, having only a quarter-circle turn at the end. The groove is deeper than in those commonly used, to admit more securely the point of the knife, &c.

Case of tetanus alluded to under this head, (No. 26) is since dead.

Aug. 14.—Case of strangulated cœcal hernia. The patient a robust elderly African. We have not yet learnt the particulars of this case to enter further at present into detail.

LITERARY INTELLIGENCE.

Dr. Power has in great forwardness a second edition of his Treatise on Midwifery, the whole being newly arranged and comprising material alterations and additions.

TO CORRESPONDENTS.

Philanthropol's Second Letter on the Milbank Penitentiary is received, and will be inserted in our next number.

Case of hemorrhage received a week or two ago has been mislaid, or it should have appeared in regular course.

Dr. Syllabub is a rank, venemous libel on the character of a most respectable practitioner; consequently we cannot give it our countenance.

Medecina is received.

L. will not do.

X.X. savours too much of the bar.

A correspondent requests us to enquire of Mr. Holt, Sen. of Lambeth, and Dr. Walshman, of Kennington, the cause of the death of Mr. F. the licensed victualler, Locksfields, a few days ago. Also to ask the treatment that was advised when the latter was sent for. As we are promised the particulars of this case; as well as an account of the efficacy of a few drops of ether, in water coloured with saffron, for relieving affections of the head, and oppression at the præcordia; we shall until then suspend our remarks.

London:
Printed by E. JUSTINS, 41, *Brick Lane, Spitalfields.*
Published by COX and SON, St. Thomas's Street, and 39, High Street, Southwark. Sold also by Sherwood, Neely, and Jones, Paternoster Row; Simpkin and Marshall, Stationers' Court; John Cox, Berner's Street, Oxford Street; Callow and Wilson, Gerrard Street, Soho; W. Stewart, South Bridge Street, Edinburgh; J. Cameron, opposite the College, Glasgow; Hodges and M'Arthur, Dublin; &c. &c.

THE WEEKLY

MEDICO-CHIRURGICAL & PHILOSOPHICAL MAGAZINE.

No. XXIX.] SATURDAY, AUGUST 23, 1823. [*Price* 4*d*.

" FLORIFERIS, UT APES, IN SALTIBUS OMNIA LIBANT
OMNIA NOS, ITIDEM, DEPASCIMUR AUREA DICTA."

BIOGRAPHICAL MEMOIR OF THE LATE JOHN HUNTER.

(Continued from page 51.)

It was in this year that, by an exertion in dancing, Mr. Hunter broke the tendo achillis; and, in consequence of which, he introduced an improved mode of treating such an accident: of this the following transcript from his lectures is offered, from its not being referred to by modern writers.—" A broken tendon (says he) usually arises from the power of a muscle being put into full action, and a sudden resistence taking place at the same time. Of all others, the tendo achillis is the most exposed to these effects, on account of the great power of the gastrocnemius muscle, and its constant use when the leg is moved with great force and rapidity. Yet when the action is completely voluntary there is little danger, inasmuch as all the parts unite in supporting each other, and the foot will be almost in a line with the leg, in order to bring the heel gradually to the ground, and thus to lessen the shock. I believe it often happens when the subject is fatigued, and off his guard, as in dancing."

From Sir Everard Home, we have no account of Mr. Hunter's town residence till he settled in Jermyn Street, in the house given up to him (1768) by his brother, upon having completed his house in Windmill Street, in which his collection was deposited, where it remained until its removal to the University in Glasgow. In this house in Jermyn Street, which was commodious and well situated for private practice, Mr. H. lived ten years. He now became a member of the corporation of surgeons, as the college was then called; and in the year following, through the interest of his brother, was elected one of the surgeons of St. George's Hospital. It was now that he had acquired all that was necessary to give his talents and industry their full scope. He was fellow of the Royal Society, and had an Hospital.

In the year 1773, Mr. Hunter first made up his mind to become a public lecturer; his reason for which was usually explained as often as he began his course, viz. because he was frequently hearing his opinions either incorrectly quoted, or delivered as the discovery of others; till, at last, he found it absolutely necessary to explain them himself systematically.

For the two first winters the lectures were gratuitous to the pupils of St. George's Hospital. In 1775, they were first publicly given on the terms of other teachers. For this, or for continuing them, there could be no pecuniary motive. As he was under the necessity of hiring a room and lecturing by candle light, his emoluments must have been trifling. The lectures not being considered a necessary part of the medical education, his class was unusually small: and of the few that heard him, the greater part acknowledged the difficulty they found in comprehending him, which was often proved by their incapacity of keeping up their attention. This, however, may be partly imputed to his lectures being read from a copy transcribed by another

hand. A lecture delivered in this manner must evidently lose much of its interest, from the eye of the teacher being always directed to the book. Neither is this the least disadvantage.

Having now a settled mode of life, fair prospects, and a daily increasing reputation, Mr. Hunter indulged to the utmost his favourite pursuits. These were physiology, more particularly as connected with pathology. Inflammation, whenever it occurred, he perceived to be the most common cause of organic lesion. Besides his accurate investigation of the laws of inflammation immediately after injuries, and in every subsequent stage of a wound, he excited it artificially in order to trace the progress of it in parts, according to the difference of their structure, situation or functions.

Mr. Hunter had now attained his fiftieth year, thirty of which had been devoted to the profession. He had enjoyed such means of improvement as few, if any other person could boast; he had improved them with a diligence never exceeded, and with a capacity beyond all comparison. His introduction to the public was not less favourable: immediately on his appearance in London, he was attached to the first and almost only anatomical school; in which, soon after his arrival, he became the principal instructor in the practical branch. He had been eleven years member of the Royal Society; and nine an hospital surgeon. He had gained the highest reputation as an army surgeon; was noticed, admired, and respected by the most enlightened characters of the age, and had enjoyed the patronage of his brother, at that time in high credit with the first nobility, and with royalty itself.

In the year 1783, says Sir Everard Home, Mr. Hunter was chosen into the Royal Society of Medicine, and Royal Academy of Surgery in Paris. In 1786, on the death of Mr. Middleton he was appointed deputy surgeon-general to the army, the emoluments of which, though not considerable in time of peace, must have been a very desirable improvement to his income. In the same year he published his grand practical work on a disease generally admitted to have been unknown till the close of the fifteenth century. In less than sixty years afterwards, nearly a hundred treatises de Morbo Gallico were collected by Alloysius Luisinus; and within little more than two centuries Astruc enumerated two hundred respectable writers, omitting probably a still greater number who had fallen into oblivion. From the time of Astruc few men of celebrity have engaged in a controversy on which they felt incompetent to offer a decided opinion. Sydenham and Boerhaave indeed thought it their duty not to shrink from such an enquiry, especially as they soon found it consigned to men of little principle and of less understanding.

In the spring of this year Mr. Hunter had a very severe illness, which confined him to his bed, and rendered him incapable of attending to any kind of business. His recovery was very slow: and his health received so severe a shock, that he was never afterwards entirely free from complaint, or capable of his usual bodily exertions. After his recovery, he was subject to affections of the heart upon every occasion that agitated his mind, or required any sudden exertion of the body. In this infirm state, he was unable to attend his patients upon sudden calls in the night, or to perform operations without assistance; —and, for these reasons, says Sir Everard Home, "I continued to live with him till within one year of his death, and then took a house within a few doors; which in no respect detached me from his pursuits, or prevented me taking a part in his private practice."

(*To be concluded in our next.*)

DR. GALL.

Of Alienations which incline the Patients to attempt the life of their neighbours, their children, or other persons innocent with respect to them.

(This Article concluded from page 52.)

A baker at Manheim, who, from his youth, had evinced, in all his undertakings, a very timid disposition, and who, for upwards of ten years, had laboured under fits of profound melancholy, accompanied with general nervous debility, took it into his head that the purchase he had made of a house was the cause of his own misfortune as well as his wife's, whom he dearly loved. He was continually complaining and lamenting his condition, which he maintained was the most unfortunate in the world. He sometimes had paroxysms of insupportable anguish; he was continually wishing for death; and for a length of time he assuredly would have taken it at his own hands, if, according to his own expression, it had not been a sin. He was always speaking of a French blacksmith who killed himself after having killed his wife. "Thou art very unfortunate," he would sometimes say to his wife in the most tender tone of voice, "I must be obliged to kill thee as the French emigrant did."

I know a woman about 26 years of age, at present in good health, who was attacked with the same complaint; she had successively all the symptoms of this disorder; she experienced, particularly at the time of her periodical evacuations, inexpressible anguish of mind accompanied with the frightful temptation of killing her husband and children, who were infinitely dear to her. She shuddered with horror when she described the internal struggle that was going on between her duty, her religious principles, and the impulsion that excited her to the most atrocious action. For a length of time she had not courage enough to bathe her youngest child, because an internal voice was continually saying to her, "let it slip, let it slip." Very frequently she had scarcely strength or time necessary to throw from her a knife which she was tempted to plunge into her own breast and her children's. If she went into her children's or husband's room and found them asleep, a desire to kill them immediately took possession of her. She sometimes shut the door in a hurry and threw away the key, to prevent her from going back again to them during the night, should it happen that she was unable to resist her infernal temptation.

It is in this manner these unfortunate creatures often pass entire years; many of them carrying about them instruments of destruction, uncertain and irresolute upon the manner, time and place of putting an end to their own life, or that of those belonging to them. It frequently happens that the means of self-destruction fails; it is seldom, nevertheless, that these paroxysms cure them. The greater number remain melancholy and depressed. After a few days, they appear to repent of what they have done; they are confused at the idea of it, and for some time take their part in the common occurrences of life. But it is not long before the paroxysm returns with renewed violence, until at length the most perfidious symptoms are manifested, such as visions, apparitions, the sound and orders of strange voices, &c. These are prognostics of a most violent attack; during which, should the patient kill those most dear to him, he generally falls immediately afterwards upon himself; and, should he fail here in accomplishing his design, or the symptoms have somewhat abated by the blood he has already shed, or the blow been two weak or ill-directed, or if he has been interrupted in the execution of it, he gives himself up to justice and asks for death as the only term to his sufferings.

This malady is sometimes concealed under a mask entirely different

an appearance. Life is equally a burthen to such patients; but they have not the power of destroying themselves; they seek, by a kind of confusion and contradiction in their ideas, the means of destruction from others. It is with this view they commonly murder some one entirely innocent with respect to them, and most frequently children are the victims they select for their purpose.

The physicians who consider the kind of melancholy which leads to self-destruction and the destruction of others as incurable, are wrong.—I have radically cured several patients who had laboured under all of the preceding symptoms. After several weeks treatment, these patients commonly void a great quantity of glairy fluid, as well as get rid of all sorts of impurities through the medium of the urinary passages, menstruation, and the hæmorrhoidal vessels. These critical evacuations, which continue for a length of time, are more abundant at certain periodical returns; and as, towards the time of their appearance, the symptoms of the disorder are exacerbated, these apparent relapses serve to announce an approaching evacuation. By degrees their countenance becomes clearer and cleaner—their eyes more animated—the mind more serene; the patients now take some concern in matters that are going forward before them, and place confidence in the remedies which, for the most part, they must be compelled to take. It is only after several artificial critical evacuations that a complete cure is obtained; and the treatment is longer or shorter, in proportion as the disease is recent or of long-standing, or more or less inveterate. Even after a long interval —great changes in the atmosphere —passions and affections greatly excited, a relapse may recur. The cure is not so easy when the disease is hereditary, or when the symptoms have appeared at an early age, &c.

OMBONI ON CLINICAL MIDWIFERY.

(Concluded from page 59.)

On examination after death, it was found that though the edges of the wound were in contact, no attempt at union had taken place; the wound in the uterus corresponded to the lower angle of the external incision. The stomach and arch of the colon were much distended with fœtid gas; the intestinal tube was slightly inflamed in some places, particularly in the iliac fossa, where some grumous blood was lodged. The uterus was of the size of a child's head; the incision in it had not united, the edges being black, fœtid, and slightly gangrenous; although originally made in the middle it was found directed to the left side, probably from the unequal contraction of the sides of the uterus. The body and fundus were nearly an inch thick, the cervix being only sometimes soft and flaccid. The anterior part of the bodies of the lumbar vertebræ were remarkably inclined to the left side, although posteriorly the spinous processes were exactly in the median line; the whole circumference of the superior aperture of the pelvis was much smaller than natural; the left ilium projected, and was half an inch lower than the right, so that the abdominal aperture of the pelvis differed from its natural figure, being deeper and wider at the left and posterior part contracted anteriorly, and the angle between the pelvis and spine formed by the projection of the last lumbar vertebræ, and not by the sacrum as usual. The distance from the anterior superior spine of one ilium to that of the other was seven and a half inches; the sacro-pubic diameter was three inches one line; the right diagonal four and a half inches; the left only four; the hollow of the pelvis was shallower than natural, but otherwise perfect; the diameters of the perineal aperture were about a quarter of an inch deficient.

From these measurements it will

appear that the head did not rest on the sacrum, but on the projection of the last lumbar vertebræ, and in front on the pubes, a little higher on the right side than on the left; and hence we see the reason of the high position during labour, and the difficulty of reaching the head with the finger. The necessity for the operation in this case arose from the unfavourable position of the child in a pelvis smaller than natural. Some in this country will doubt that any necessity existed. The antero-posterior diameter, three inches, would certainly have admitted the passage of the head when lessened by the perforator. The attempt to apply this instrument does not appear to have been actually made, and there is no proof that the state of the os uteri, although excluding the forceps, might not have admitted of its cautious employment.

In twenty-five cases, the child presented with the occiput to the right acetabulum; in twelve, with the occiput to the left acetabulum; and in three, with the occiput to the right sacro-iliac symphysis; two presented with the feet, in one of which the toes were turned to the right sacro-iliac symphysis, and in the second to the right acetabulum; lastly, two presented with the nates, the feet being directed to the right sacro-iliac symphysis. Of forty-eight children, four were premature, in one of which, born at the sixth month, the cerebrum was wanting, although the base of the cranium and the face were developed. A membranous bag, filled with a bloody fluid, occupied the place of the skull; the spinous processes were separated even to the sacrum, and the spinal marrow was separated into many filiform masses. The greatest length of any of the children was twenty-one inches three lines; the least fifteen inches nine lines; the greatest weight was 12lb. of 12oz. each; the least was seven. Twenty were males, twenty-eight females. There was not any thing very remarkable in the placentæ or funes.

Almost the only accident during labour was a trifling laceration of the fourchette, excepting in a case already alluded to of anasarca. In this instance, there was almost a state of gangrene before labour, so that it was impossible to prevent a considerable laceration. One woman was affected with intermittent fever, another with rheumatic synocha, another with gastric synocha, and all recovered before labour; a fourth had been attacked by an intermittent fever with commencing anasarca before her admission. Bark and other remedies did no good; after a long hard labour the anasarca increased; with the secretion of milk acute hydrothorax appeared, and in a few days destroyed the patient. The dissection showed, that besides a copious collection of serum, mixed with flakes of puriform lymph, the left lung contained many small vomicæ, was hepatized and indurated in many places, and bore marks of previous inflammation. Two patients were epileptic during pregnancy, though this disease had not the least influence on the labour. Five were affected with various complaints after labour; one of these suffered from a most serious nervous fever of the same kind with one recorded in a previous year, and which the professor considers identical with a puerperal fever recently prescribed by some English writers. (*Qu.* Dr. M. Hall), which, according to them, is aggravated by blood-letting, and which commonly terminated by copiously black and fœtid discharges from the uterus, as was the case in the present instance. The greatest extent of the antero-posterior diameter in forty-six well-formed women, ascertained by the pelvimeter of Baudelocque, was four and one quarter inches; the greatest diagonal was four and three quarters; the least sacro-pubic diameter was three and two-

third inches: and the least diagonal four and one-third inches.

From Paris and Fonblanque's Med. Juris.

(Continued from p. 55.)

Of Poisons.—The extent of this subject would render the attempt at following our authors through the consideration of each noxious agent futile. We feel the less regret, however, on this account, as the study of toxicology has lately attracted particular attention, and as the principal facts connected with it are generally known and easily accessible. We shall advert, however, to some questions touching medical evidence in cases of poisoning.

1st. May not all, or most of the symptoms, characteristic of the action of corrosive and narcotic poisons arise from causes of spontaneous origin? On this subject a striking difference of opinion was shewn in the medical evidence, on a well known trial for poisoning by arsenic, which occurred in Cornwall, in 1817. It would appear, that in the symptoms there is nothing which can distinguish the different causes of irritation in the primæ viæ, yet a discrimination may frequently be made by an attentive examination of collateral circumstances. It must be confessed that in the case of poisoning by narcotics, conclusions cannot with any security be drawn from the symptoms only.

2d. May not organic lesions, similar to those produced by poisoning, occasionally result from natural causes? The answer to this question must vary in different cases; inflammation, for instance, of the alimentary canal may be the consequence either of poisoning or of more ordinary causes. Its most important relation is to perforations of the stomach, which may be produced either by the process of digestion after death, or by the action of corrosive poisons. For a discrimination between the effects following these different causes, we refer our readers to Vol. III. p. 259, of this Journal.*

3d. Is the rapid progress of putrefaction generally or locally to be considered as affording presumptive evidence of poisoning? The diversity of opinion on this point has been so great, that it may be assumed as a principle, that the fact of accelerated or retarded putrefaction cannot be received with any confidence, as a collateral indication of poisoning.

4th. How far is the absence of poison, or the inability of the chemist to detect it, in the body or the fluids ejected from it, to be received as a negative to an accusation of poisoning?

Although this circumstance, whether real or supposed, considerably weakens the evidence of the occurrence of poisoning, it by no means excludes the supposition of its possibility. Dr. Bostock has shewn *(Ed. Med. Sur. Jour. No. 17.)* in the instance of corrosive sublimate, that an animal may be suddenly killed by receiving a metallic poison into the stomach, and yet that the most delicate tests may be inadequate to detect its existence.

5th. What degree of information can be derived from administering the contents of the stomach, of a person supposed to have been poisoned, to animals? Such a test must always be liable to considerable uncertainty, and much inferior in accuracy to others which may be employed with equal ease. It is to a certain extent true, that substances poisonous to man will not always occasion deleterious effects in animals. In the case of a mineral poison, it must always be preferable to draw our conclusions from the results of an examination of the suspected matters by appropriate tests.

With a view to explain and appreciate the relative importance of each of the preceding objects of inquiry, in cases of supposed murder,

---

* *Quar. Jour. For. Med. &c.*

we are presented with a commentary on the principal ones.

1. The patient is living, and medical assistance is required. Here we have the least complicated case, and it is only necessary to guard against the operation of various errors and prejudices. The practitioner must inquire into the previous state of the patient; his age and occupation; above all, the present symptoms; whether he has previously suffered a similar attack; whether any of his friends or family are similarly affected; the quantity and quality of the meals last taken; the remedies used; if any, by whom recommended, by whom administered; lastly, the appearance of the evacuations.

2. The patient is dead. The attendants can furnish only an imperfect account of his dissolution. Here our inquiries are to be directed to ascertain whether he had died during a paroxysm of passion, which might produce apoplexy, and accelerate the fatality of other diseases; whether he was intoxicated; how soon he is supposed to have died after the alleged cause of dissolution.

3. The person is dead, and the history of his dissolution unknown. Many important circumstances may be learned by the inspection of the body; for this reason we should note its situation and attitude; the general appearance of the countenance, as to colour, vascular turgescence, &c.; whether any discharge issues from the mouth, nose, ears, &c.; the apparent age, bulk, stature, obesity, muscularity, &c.; formation of the neck as to shortness, thickness, &c.; the probable period that has elapsed since the extinction of life; the presence or absence of punctures, contusions, or other injuries, and the proofs they afford of the employment of any particular instrument; whether the wounds were mortal, or sufficiently severe to have caused death; whether they were inflicted during life; whether they resulted from an act of suicide, from accident or design: in the case of a female, whether there be any signs that would indicate the commission of a rape. Neither should the examination of surrounding and collateral objects be neglected; as the description of the place where the body is found; whether there be indications of a struggle, or traces of footsteps; the neighbourhood of weapons, and their relative position; if the body be found in the water, whether it was killed by drowning, or by other means; if found hanging, whether suspended during life, or after death; whether an act of suicide or of murder; lastly, if the deceased is found in an apartment, whether that be in a house of ill fame?

(To be continued.)

Dr. Heinrich Spitta's Surgical Remarks.

(Continued from p. 58.)

Hernia.—According to Dr. Spitta, the general treatment of hernia in France is characterized by a rigorous adherence to the antiphlogistic system, particularly by copious general blood-letting, whilst the cold applications so generally employed in other countries are almost wholly neglected, and supplanted by warm fomentations—a measure which Dr. S. considers not only useless, but injurious, by favouring the afflux of blood and the occurrence of inflammation. On the contrary, he thinks highly of the tobacco injection, from his experience of it in many cases, and believes that an antispasmodic treatment, particularly soon after the occurrence of strangulation, is attended with much better effects than the common antiphlogistic one. On the same principle, he prefers the application of leeches to general bleeding. He insists on the danger of long continued or forcible attempts at reduction—a practice, as he says, little likely to be employed by any one who has felt the firm

constriction made by the abdominal ring or neck of the sac, often so considerable as not to admit the introduction of the finest probe at the time of operation.

A man, aged 42, had a scrotal hernia, which he kept reduced by means of a truss. On the evening of Jan. 31, 1821, in the act of straining at stool, the rupture protruded, and resisted all his efforts at reduction. A surgeon called to his assistance attempted the taxis but for a short time, as in the few hours which had elapsed the tumour had become very painful. He was bled, put into the warm bath, and injections administered, but without success. The colic increased, and extended through the abdomen; nausea and vomiting appeared; the pulse was small, hard, and quick; he passed the night without sleep, and in great pain. On the following morning, Feb. 1, he was taken into the Hotel-Dieu, disposed to submit to any thing that might relieve him. M. Dupuytren resolved on the operation. After the tense and inflamed scrotum had been divided from the abdominal ring to its lower part, the sac appeared, which, besides the protruded parts, contained the testicle. An incision cautiously made into the sac allowed the escape of a small quantity of fluid, and exposed a portion of omentum swelled, red and hard. Behind it lay a loop of intestine, three inches long, of a brown red colour, and highly distended with air and fæces. The stricture was divided by a bistoury passed sideways on the forefinger into the ring, and then turned with its edge upwards. The protruded parts were so closely embraced by the stricture as to render the introduction of the finger rather difficult. When the ring was divided, it was discovered that the neck of the sac formed a second stricture: this was divided in the same manner as the former. The air and fæces in the protruded parts were then gradually expelled by gentle pressure, and the gut immediately entered the abdomen. The omentum was then replaced, and the wound lightly dressed with charpie and cerate. The patient was put into bed, and M. D. ordered him to be bled in an hour, and again at the end of three more. An injection was given, and a warm bath in the course of the day.

In spite of the bleeding, of repeated injections, and the use of the warm bath, the constipation and vomiting continued obstinately during the two next days, and the pains rather increased than diminished: pressure on the abdomen gave great pain. The pulse was small, quick, and hardly to be reckoned; and the sunken countenance and cold extremities of the patient afforded a very unfavourable prognosis. Another bleeding (the fourth from the occurrence of strangulation) was ordered, forty leeches applied to the abdomen, and he was put into the warm bath. Calomel also was given in considerable doses, so that by the next morning, Feb. 4, he had taken 24 grains with the effect of putting a stop to the vomiting, and procuring relief by the expulsion of flatus, though without any evacuation. By the continued use of calomel and the warm bath one offensive stool was procured on the next day, Feb. 5, with but little abatement of the pain in the abdomen, which was greatest about the wound. The warm bath was continued, and in the evening of this day he took ten grains of calomel at a dose, which produced two motions in the night. During the next 24 hours he remained in a very doubtful state, and the danger of the abdominal inflammation by no means abated; the abdomen was tense, and still rather painful; the pulse small and frequent, the countenance sunk and pale.

Feb. 7th, a sudden improvement took place; the bowels acted regu-

larly; he had slept soundly; the belly had fallen, and become soft; the pulse rose, and the skin was moistened by a general perspiration. A swelling appeared in the right iliac fossa, which Dr. S. has remarked in similar cases, and attributed to a chronic inflammation of the protruded omentum. It generally ends in suppuration, and may be detected by a copious discharge of matter through the abdominal canal. Occasionally this matter is effused into the bag of the peritoneum, and gives rise to a very fatal form of abdominal inflammation. From this time the patient began to recover, and was soon in a condition to leave the hospital.

(*To be continued.*)

Experiments on the Effects of Apertures made into the Chest. *By* DAVID WILLIAMS, M.D.

These experiments were instituted from a desire to examine a very important physiological hypothesis, advanced by Dr. Carson. That gentleman has published a pamphlet,* consisting of three essays,—one, on the Elasticity of the Lungs; another on the Vacuity of the Arteries after Death; and the third, on Lesions of the Lungs. In the second essay, or that on the Vacuity of the Arteries after Death, he relates two methods that he adopted for killing animals, by admitting air through different parts of the parietes of the chest into both its cavities simultaneously, thereby collapsing the lungs. One method was by making an opening, of about an inch in length, between a pair of the ribs on each side of the thorax. The other was by making an opening, fit to admit his two fingers, from within the abdomen, through the muscular part of the diaphragm on each side. Instantaneous death was the result of the latter method in all his trials. In the former, death was not less certain, though a little more tedious: the life of one animal was protracted for twenty minutes. In his 3d essay, or that on Lesions of the Lungs, Dr. Carson details an experiment performed on three rabbits, as follows:—An incision was made between two of the ribs, on one side, into the cavity of the chest, and the air was freely admitted, (when he concluded that the lung must have been reduced to a state of collapse;) then the wound was allowed to close, and heal. At the distance of five days, a similar opening was made into the cavity of the opposite side; when one out of three rabbits soon expired after the second operation. Dr. Carson inferred from the result, that it is possible to collapse one of the lungs, and to retain it in that state *ad libitum*, by keeping open the communication between the cavity of the chest and the external air; and, further, that, upon allowing the opening to close, the lung in a given time will resume its wonted function, thereby rendering it practicable, when conceived necessary, to place the opposite lung under the like discipline. Dr. Carson has very ingeniously proposed the application of his views to the cure of one of the most frequent and fatal of diseases, phthisis pulmonalis; and, in a single instance, he has reduced his hypothesis to practice, by sanctioning the operation on a consumptive patient in this town.

Mr. Williams's experiments were made on dogs, from which it appears:—

1st. That a lung will not collapse from exposure to the atmosphere, as long as respiration is carried on by the opposite one.

2d. That a lung possesses for a time, independently of the influence of the diaphragm and intercostal muscles, if respiration is carried on by the opposite one, a peculiar motive power; the source of which he does not pretend to explain.

* Essays, Physiological and Practical. By James Carson, 1823.

3d. That a sound lung soon regains its full power of expansion when the pressure of the exterior air is removed.

4th. That air, freely and uninterruptedly admitted into both the cavities of the chest simultaneously, through tubes of a certain calibre, will not collapse the lungs, if the auxiliary respiratory organs are unrestrained.

5th. That air admitted into both the cavities of the chest (of a middle-sized dog) simultaneously, through apertures of an inch and better in length, in the intercostal spaces, will not collapse the lungs, provided the animal is allowed, unconfined, the use of his respiratory organs.

6th. That a sound lung never fills the bag of the pleura, at least during ordinary respiration.

If the last physiological inference be correct, it is highly interesting in a pathological point of view. It enables us to explain how hydrops thoracis, or that species of it, hydrops pleuræ, may exist to a certain extent, without being attended with any symptoms indicating the presence of the disease, as related by numerous medical authors. We can also more satisfactorily account how the lung so frequently escapes being wounded, when weapons penetrate the cavity of the thorax; and how the extravasation which follows, if not considerable, produces but little derangement. It may also have a practical utility; for it informs the surgeon that the lung descends to a certain point only, so that he need not be afraid of wounding it, should an operation be required below that position.

Medico-Chirurgical Transactions, published by the Medical and Chirurgical Society of London. Vol. VII. Part II. No. I.

The first paper in this second part consists of an interesting (though rather prolix) communication from Professor Maunoir of Geneva, intitled *Observations and Cases relative to the Operation for Artificial Pupil.* It contains an account of the case of the Marquis of Beaumanoir; who, after a succession of incidents, of a nature injurious to the eyes, during a space of thirty years, finally lost the sight of both. They were affected with cataracts, together with an obliteration of the pupils, in consequence of their adhesion to the iris; and an operation had been attempted on one eye, but without success, by Mr. Beer of Vienna, when the Marquis applied to Professor Scarpa, who recommended him to Mr. Maunoir. This gentleman gives a minute detail of the operation, which ultimately proved successful; it consisted in making an incision in the lower part of the cornea, and then introducing, between the cornea and the iris, a pair of scissors, one blade of which was sharp and the other blunt, penetrating the iris with the sharp point, and removing a portion of it in order to form a new pupil. At the same time, the greatest part of the opake lens was removed; and a portion of the capsule, which was left, was gradually absorbed.—Two other cases are then related, in which a similar affection of the eye was remedied by the same kind of operation; and the paper concludes with some judicious observations from M. Scarpa, recommending a slight alteration in Professor Maunoir's process.

Case of Inflammation of the Muscular Structure of the Heart. By Edward Stanley, Esq. of Bartholomew's Hospital.—The inflammation occurred in a child of twelve years old, and proved fatal on the fourth day: the principal symptoms were general fever and delirium; and it is remarkable that in no period of his illness did the boy complain of pain in any part of the chest, nor was any irregularity observed in the action of the heart or arteries. On dissection, the substance of the heart itself, and of the parts immediately

connected with it, exhibited marks of acute inflammation, while in the brain no morbid appearances could be detected.

Case of a Wound of the Peroneal Artery. By George James Guthrie, Esq.—A gun-shot wound of the leg had ruptured the peroneal artery, so as to produce repeated hæmorrhage and symptoms of gangrene, giving rise to indications of the most dangerous kind. To obviate the necessity of amputation, Mr. Guthrie resolved to tye the artery above the injured part, and completely succeeded in his object.

Case of a Gun-shot Wound and Fracture of the Tibia. By John Boggie, Esq. Surgeon to the Forces.—The fracture remained for a long time without uniting; and a cure was finally effected by inserting a seton between the ends of the divided bone. This plan was adopted, as our readers will be aware, in consequence of the facts brought forward by Mr. Wardrop in the fifth volume of these Transactions.

A very interesting and valuable communication, from Philip Crampton, Esq. Surgeon-General to the Army in Ireland, describes *A new Method of operating for the Cure of External Aneurism.*—The author remarks that the experiments of Jones led to the conclusion, that adhesion of the internal surfaces of the artery can take place only when the inner and middle coats of the vessel are completely divided; that this conclusion had been greatly adopted; and that it had even produced a considerable influence on surgical practice: but, though much credit is due to Dr. Jones for the ingenuity of his operations, the practical deductions that have been made from them are supposed to have been formed too hastily. No experiments have been made to prove that the adhesion cannot take place without the division of the coats; and the experiments were in course all performed on brutes, whose arteries appear to differ from those of the human subject in not being liable to aneurism. On the contrary, Mr. Crampton supposes that adhesion *can* take place without the division of the coats, and even that this division is sometimes unfavourable to the process of reunion. Cases are then recorded in which arteries have been obliterated by the pressure of tumours on them, by the tourniquet, by inflammation of the vessel, and by the effusion of lymph from its internal surface. Some experiments are next related, as performed on sheep, in which arteries were obliterated by simple compression, and it is certain that the coats were not divided. Mr. C. then endeavors to prove that ulceration of the artery and secondary hæmorrhage are a frequent consequence of the division of the internal coats; and on the whole he concludes, not that this division is necessary to the adhesion, but that the 'adhesion may take place under such circumstances.' He states his own view of the subject to be that a moderate degree of pressure and of external irritation is capable of producing the obliteration of the vessel; and on this principle he founds his operation: which consists in applying round the vessel a tape, that is kept in his situation by an instrument called *presse artere*, by which the stream of blood is stopped, and the contents of the sac are suffered to coagulate. His operation therefore proceeds from the same principle with that of Hunter, viz. cutting off the supply of blood, and differs from it only in the manner in which the obliteration of the vessel is attempted. —Without venturing absolutely to decide on the question, we have no hesitation in recommending Mr. Crampton's essay as an ingenious and sensible view of an intricate question, and as likely to lead to an immediate improvement in practice. We must not omit to state that two

cases are related, in which the new method was employed with success.

A Sketch of the Medical History of the first Battalion of the First Regiment of Foot Guards, during the Winter of 1812—13, related by John Bacot, Esq. Surgeon to that Battalion.—The detail is very melancholy, but is valuable as exhibiting the effect of various external circumstances, in producing fever and dysentery.

Mr. Howship next continues his *Microscopic Observations on the Structure of Bone*, of which we had the commencement in the sixth volume; and, having on the former occasion given an account of the original formation of bone, he now enters into that of its structure and organization. By examining transverse sections of a cylindrical bone, he discovered in them numerous longitudinal circular canals, filled with a soft substance like spermaceti. Hence he concludes that these canals contain a medullary secretion, which occupies a considerable part of their capacity, and that they do not merely serve for the transmission of vessels. The canals, which are principally longitudinal, 'pass through the compact and solid structure of the cylinder of the bone;' and they have many 'lateral communications with the internal or medullary cavity, and also with the external surface of the cylinder.' It is not, we think, very evident whether each canal is furnished with a small vessel, which is imbedded in the medullary matter, or whether this be the case with some of them only: but we are informed that, in those instances in which a vessel was visible, it did not occupy nearly the whole of the canal. The author seems to have taken much pains to trace out the direction of the canals, and their communications with each other; and the principal point that was ascertained is that the canals are larger towards the *internal* surface, and smaller towards the *external* surface of the cylindrical bones. The diameter of the canals in a portion of the humerus was 'about the 1,200 of an inch, but they varied from the 1,100 to the 1,400 of an inch.'—This paper is accompanied by some characteristic engravings.

A second paper by Mr. Stanley, contains *Observations on the Condition of the Bones in Rickets*, and on the process by which they resume their solid and healthy condition; a subject which had been before but little investigated. From the account of Leveillé and Bichat, which is confirmed by the present author, we learn that a ricketty bone presents throughout an homogeneous appearance, is soft and spongy, and contains a gelatinous substance. By examining bones which had formerly been in this diseased state, but which had afterward resumed a healthy action, it was found that the deposition of earthy matter was always in that part in which additional strength was the most requisite: but we are not furnished with any data by which we can ascertain in what way this object is attained. The inquiry is illustrated by a series of plates.

Further Observations on Contractions succeeding to Ulceration of the Skin. By Henry Earle, Esq. —We have here several additional cases of the efficacy of the mode which Mr. Earle suggested, for removing the contractions that sometimes ensue from extensive burns.—The same gentleman has also drawn up a case of *Hernia of the Dura Mater, connected with Hydrocephalus Internus.*—In this instance, an attempt was made to perform a radical cure in the manner proposed by Mr. Cooper in the *spina bifida:* but the object was defeated, apparently in consequence of the existence of the internal collection of fluid, between which and the external tumor there was a direct connection.

Description of an Extra-Uterine Fœtus contained in the Fallopian

Tube. By George Langstaff, Esq. —It would carry us beyond our accustomed limits to enter into all the particulars of this case, but the following are the most important. The patient was taken ill very suddenly, and died in a few hours, with symptoms of complete exhaustion. On examining the body, it was found that the tube was ruptured in two places, and that a very great hæmorrhage had taken place into the cavity of the abdomen. The substance was equal in bulk to a 'moderate-sized hen's egg,' and contained 'a chorion and amnios, with a fœtus of about eight weeks, floating in the liquor amnii.' Some change had taken place in the uterus; but, on the whole, less than is usually observed in such cases. The portion of the fallopian tube, between the fœtus and the angle of the uterus, was completely obliterated. Mr. L. concludes by comparing this case with others of a similar kind which had been published, and with some sensible remarks, both pathological and physiological.

(*To be continued.*)

Hydrocephalus.

An extraordinary case of hydrocephalus, or water of the brain, is just now exciting the interest of the medical gentlemen of Salisbury. The head of an infant, before any operation was performed, at the age of six, now only seven months, was of the following astonishing dimensions:— round the forehead and back part of the head 30 inches, and from ear to ear across the vertex 21 inches; which measurements will be better understood by stating, that the larger circumference of the adult head averages but 22 inches, and from ear to ear but 12; and of a healthy child of six months old the largest circumference averages 16, and from ear to ear 9 inches. The infant, belonging to respectable parents, is under the immediate treatment of one of our surgeons, and is submitted to a novel practice, viz. the removal of the water by degrees, through the means of operation, and at the same time the employment of pressure. The infant has undergone the operation 5 times, and 110 ounces (nearly seven pints) of water have been removed. The present state of the infant, and the effects of the operations and treatment are such as afford well-grounded hopes that for this disease, considered hitherto hopeless, a remedy has at length been found.—(*Salis. Jour.*)

MELANGE.

Heliotrope.

According to Dr. Brandes and Firnhaber, the heliotrope is composed of

Silica	96·25
Protoxide of Iron	1·25
Alumina	0·86
Water	1·05
	99·41

It, therefore, resembles chalcedony on silica being slightly mixed with other bodies.

Helminthology.

M. Virey informs us, that he has received a memoir on the vermifuge powers of the pomegranate bark (*punica granatum,*) from Dr. Gomez, who relates fourteen cases of its successful exhibition. Dr. G. presents us also with descriptions of five varieties of tænia, different from those found in the human body in our climate. It is known, in fact, that entozoaries are not the same in all countries, but that they appear to have a preference: the *tænia lata*, or *botheriocephalus latus*, of Rudolphi, is most frequent in the northern regions; the *cucurbitana* is met with especially in Italy, according to Brera; and it is to be presumed that the *filaria papillosa* of Rudolphi is one of the causes of the ophthalmia of Egypt, as a pellucid ascaris has been found in the vitreous humours of the eyes of horses in India. If the figures and description given by M. Gomez are exact, containing the

forms of the heads of five tænia he has observed, the catalogue of the species that attack mankind must be augmented. It will be especially necessary with respect to that tænia (No. 6,) which has five orifices in the head, — one central, and four surrounding it. The following are its distinguishing characters:—

Pentastoma, capiti oculis quinque munito, articulus brevibus, poro laterali alternante, corpore gracili. Esp. Pentastoma coarctata, articulis alternatim poro laterali unico munitis.—*(Jour. de Pharm. Mai).*

Therapeutic effects of Hyoscyamus. — "Until it shall be held absolutely necessary to procure a patient a rending headach, with vertigo, phantastic reveries, burning thirst, loss of sight, perversion of the taste, insuperable disgust for every sort of food or drink—without a single wink of sleep, this remedy must continue utterly useless; and in the mean time, it should be expunged from every Pharmacopœia."—*Archives Gén. de Mèd. Mars* 1823. Such is the conclusion to which M. Fouquier of La Charité has been led by experiments with the hyoschyamus on 200 of his patients. He denies that it ever acts decidedly as a hypnotic. In opposition to his observations, we may remark, that for a long time it has been freely used in the infirmary of this city for inducing sleep; and that, as far as we have ourselves observed, it is as effectual as opium itself, and never produces the effects observed at La Charité. The experiments of Fouquier tend to show, that the extract prepared from the expressed juice, and the aqueous extract procured by macerating the dried plant in water at 100° F., and evaporating the product by the water-bath, are nearly or absolutely inert. M. Planche prepared for him an alcoholic extract of great power, by maceration in weak alcohol at 82°. Of this extract he seems to have given from ten to thirty grains for a dose; and always observed it produce the disagreeable symptoms we have mentioned. The form under which it is used in this country is that of tincture, very similar to that from which Planche prepared his extract. Does the alcohol qualify its properties, and render it more purely hypnotic?

Mr. James on the Colour of Alpine Flowers.

On the rocky mountains, a little above the point where timber disappears, a region of extraordinary beauty commences—intervals of soil, of some extent, covered with low, creeping, matted, alpine plants of astonishing brilliancy of colouring. Deep blue prevails, and the *pentstemon erianthera*, the *aquilegia cærulea*, and other plants, were more intensely coloured than in lower situations. May it not be, that the deep blue of the sky, the atmosphere being for the most part clear and unclouded, influences the colour of this Alpine Flora?—*(Expedition to the Rocky Mountains.)*

Rupture of the Umbilical Cord.

M. Chaussier and others having doubled the possibility of the rupture of the umbilical cord by the mere weight of the child, M. A. P. Meirieu presents us with the case of a Madame P., thirty-five years of age, in good health, and pregnant with her third child, who was struck by the pole of a coach on the left side of the abdomen, in the eighth month of her pregnancy. She, however, was not taken in labour until the conclusion of the ninth month, and was brought to bed of a female child. A few moments before this event, Madame P. was walking about her room, and was seized with a strong pain; she took firm hold of the bed-post, brought herself nearer to the ground, retained the infant by means of her clothes, and placed it gently on the floor: the whole was the affair of an instant. One of the assistants took the child, and found the umbilical cord broken. This was before the arrival of Dr. Mei-

rieu, who, on examination, found not the slightest traces of contusion on the child: it had, however, a spina bifida, occupying the lower part of the loins and the upper part of the sacrum. The umbilical cord was separated about four inches from the ring, and the end drawn out to a point.—*(Journal Universal.)*

CORONER'S INQUEST.

On Wednesday evening at seven o'clock, an Inquest was held at the Marlborough Inn, Blenheim-street, before T. Higgs, Esq. Coroner, on the body of Mr. John Thompson, aged 22, late a pupil under Mr. Brookes, the Anatomist, who came by his death at the house of that gentleman, in Blenheim-street, under the following circumstances.

Mr. George Waite, Surgeon and Dentist, of Burlington-street, deposed, that he knew the deceased. Yesterday morning he attended, along with witness, at one of Mr. Brookes's lectures, after which they repaired to a neighbouring Coffee-house to have breakfast, of which the deceased ate heartily. On leaving the place the deceased parted with witness, and returned to Mr. Brookes's, to whose house witness had occasion to go in about five minutes after, on which he was informed by the servant that Mr. Thompson had met with an accident. On proceeding to the room in which the deceased lay, he found him so insensible that he had not the faculty of speech.

Mr. Brookes deposed, that yesterday morning, while he was at his breakfast, he received a message that an accident had happened to one of the students. On hastening to the room he found Mr. Thompson, the deceased, in an epileptic fit, supported by some of the students. Witness found it necessary to bleed him, which he did copiously; notwithstanding which he died. During the loss of blood he became sick, and retched very much, and was so far recovered as to be able to put his fingers to his nose, when they applied hartshorn; but afterwards, on descending the stairs, he heard the apoplectic symptoms, which alarmed him very much, and he sent for Dr. Agar, who arrived soon after, and coinciding with witness that the deceased was in a dangerous state, he recommended that the temporal artery should be opened. Witness is of opinion he died a natural death, but could not say that he died of apoplexy, as he had not opened the head. The deceased was considered a sedulous student, and his intense application might have afflicted his mind. He had passed one examination, and was about to undergo another in a very short time, which caused his mind to be in a very anxious state.

Dr. Agar, medical professor, corroborated the last witness's testimony, and was of opinion that the deceased died of apoplexy. Verdict —"Died in a fit of apoplexy."

COLLEGE OF SURGEONS.

At the annual election of the officers of this College, which took place on the 22d of July, Henry Cline, Esq. was elected president, and William Norris, Esq. and Sir Ludford Harvey, vice-presidents. It should be universally known, that, in the Act lately passed for consolidating the laws relating to jails and houses of correction, to which the magistrates have the power of appointing surgeons, it is enacted that the surgeons must be members of the Royal Colleges of Surgeons. Correct lists of the London College may be obtained, free of expense, by magistrates, the clergy, and gentlemen, residing in the country, by application to the secretary of the College in Lincoln's-Inn-Fields.

Annual Report of the general committee of the associated Apothecaries and Surgeon-Apothecaries of England and Wales, received and adopted at the annual general meeting of the Association, held at the Crown and Anchor Tavern, Strand, July 2d, 1823.—Joseph Hayes, Esq. president.

The committee, in compliance with annual custom, submitted to the Association the result of their proceedings since the last general meeting, &c. &c. and afterwards recommended to the members that the future committee should be instructed.

1st. To ascertain, as far as may be practicable, the actual condition of the medi-

cal profession, and the obstacles which have hitherto impeded its advancement.

2d. To examine and arrange the imperfections to which its present condition is liable, showing the particulars in which the public and members of the profession are injured or aggrieved.

3d. To point out the remedies for the evils complained of.

4th. To use such means as to them may seem proper to effect (whether by application to the legislature or by other legal means,) the ameliorations to be desired.

5th. To continue to collect and record the experience of the profession on subjects relating to medical science, and to publish the same in occasional or annual volumes, calculated to prove the just claims of the different classes of the practitioners of the healing art to that confidence of the public which they have so long enjoyed.

6th. To give a brief account of the discoveries and improvements which have been made in medicine, surgery, and the accessory sciences, within the preceding year.

7th. To offer such encouragements of honorary rewards as may to them (the committee) seem proper, for the best practical essays on select subjects relating to medicine and surgery, as may call forth the energies, particularly of the younger members of the profession, and elicit improvements in the healing art.

8th. That the profits arising from the publication of the transactions of this association be devoted to the above laudable purpose.

(Published by order of the meeting),

JOHN POWELL, Secretary.

1, *Keppel Street, Bedford Square.*

Army Medical Officers' Insurance Society and Benevolent Fund.

The eighth anniversary of these institutions was celebrated (the 26th of May) at the Thatched House Tavern, Sir E. Home in the chair; when the directors-general and nearly one hundred medical officers sat down to dinner, besides many of their professional brethren: among others, the presidents of the Colleges of Physicians and Surgeons; and the master of the Apothecaries' Company, Drs. Baillie, &c. &c. It must be gratifying to such of our readers as are members of these most excellent societies, to learn the flourishing condition of their funds; that of the former amounting to £28,600 and affording an annual income from subscription alone of £1,700 : 10*s* : 9*d*.; that of the latter amounting to £2,000 having during the last year received an addition of £600. The utility of these establishments is too obvious to require comment; and we shall only add our wishes that their prosperity may continue to increase.—(*Med. Phys. Journal.*)

AN APPRENTICE WANTED,

By a Surgeon and Apothecary, in extensive practice, at some distance from town. A moderate premium expected. There are peculiar advantages attached to the above, so as to render it a desirable and comfortable opportunity of receiving professional instruction. For further particulars, apply at Cox and Son's, Medical Booksellers, St. Thomas's Street, Borough.

MEDICAL LITERATURE.

Gentlemen of the faculty intending to publish, or otherwise to arrange their papers, may receive able assistance in the revision and preparation of their M.S.S. through the medium of a gentleman of the profession, long accustomed to similar occupations; and with whom secresy and honour are inviolable. A line addressed, post paid, to Y.Y.Y. No. 39, High Street, Borough, will be immediately attended to.

LITERARY NOTICE.

Preparing for publication, Outlines of Midwifery, developing its principles and practice; intended as a test book for students, and a book of reference for junior practitioners. By J. T. Conquest, M.D. F.L.S. Member of the Royal College of Physicians, and of the Medico-Chirurgical Society of London. The third edition, enlarged and illustrated by twelve copper-plate engravings. 12mo. 7*s*. 6*d*.

TO CORRESPONDENTS.

PHILANTHROPOS *is delayed for another week.*

The Piccadilly ghost has been laid for some time; we therefore beg that "CONJURATOR" *will, at least for the present, suffer him to remain in the "vasty deep," with his other evil brethren.*

Dr. E—DY, *it is whispered, is about to take a house, either opposite, or next door to his rival, the Doctor "of London."*

London:

Printed by E. JUSTINS, 41, *Brick Lane, Spitalfields.*

Published by COX and SON, St. Thomas's Street, and 39, High Street, Southwark. Sold also by Sherwood, Neely, and Jones, Paternoster Row; Simpkin and Marshall, Stationers' Court; John Cox, Berner's Street, Oxford Street; Callow and Wilson, Gerrard Street, Soho; W. Stewart, South Bridge Street, Edinburgh; J. Cameron, opposite the College, Glasgow; Hodges and M'Arthur, Dublin; &c. &c.

THE WEEKLY

MEDICO-CHIRURGICAL & PHILOSOPHICAL MAGAZINE.

No. XXX.] SATURDAY, AUGUST 30, 1823. [*Price* 4*d*.

" FLORIFERIS, UT APES, IN SALTIBUS OMNIA LIBANT
OMNIA NOS, ITIDEM, DEPASCIMUR AUREA DICTA."

BIOGRAPHICAL MEMOIR OF THE LATE JOHN HUNTER.

(Concluded from page 66.)

In the following year, Mr. Hunter received the Copleyan medal as a return for the many valuable papers he had presented to the Royal Society.

In July, he was chosen a member of the American Philosophical Society. " He now," adds Sir Everard Home, " applied to the governors of St. George's Hospital, to be allowed, on account of his health, an assistant surgeon, which they very readily granted, and I was appointed to that office.

" His collection,* which had been the great object of his life, both as a pursuit and as an amusement, was now brought into a state of arrangement; and gave him at length, the satisfaction of showing to the public a series of anatomical facts formed into a system, by which the economy of animal life was illustrated. He showed it to his friends and acquaintance twice a year; in October to medical gentlemen, and in May to noblemen and gentlemen, who were only in town during the spring; this custom he continued to his death."

" Upon the death of Mr. Adair, in the same year, Mr. Hunter was appointed inspector general of hospitals and surgeon general of the army. He was also elected member of the Royal College of Surgeons in Ireland.

" In the year 1791, he was so much engaged in the duties of his office, as surgeon general to the army, and with his private practice, that he had little time to bestow upon his scientifical objects; but his leisure time, small as it was, he wholly devoted to them.

" In 1792, he was elected an honorary member of the Chirurgico-Physical Society of Edinburgh, and was chosen one of the vice-presidents of the Veterinary College, then first established in London.

We have seen, that for several years Mr. Hunter held the highest rank in the profession. He now acquired, by age and seniority, the same rank with the public; being the oldest hospital surgeon known to the town, and it is presumed the oldest efficient army surgeon, as he had been appointed surgeon general.

He was now consulted by all those surgeons who were attached to Mr. Pott during that gentleman's life-time. By the rising generation of medical men he was in a manner adored, and quoted with almost as much authority as the schools at one time urged the *ipse dixit* of Aristotle. From this time " everything John Hunter did was considered by the public in general as being done in the best possible method in which everything could be done." His town house was beginning to return all the sums it had cost him; it was spacious and exactly suited for his residence. The ground floor was occupied for professional purposes; and such was the afflux of morning patients, that to find room for them, the drawing room sometimes was so

* In the Hunterian oration, 1817, Mr. Cline assured his hearers, that the collection contained more than 14,000 preparations wet and dry: to these must be added shells and fossils.

suddenly deserted, that the French grammar, and other implements of instruction, were left behind.

We purposely omit Mr. Hunter's connection and difference with his brother, to come to that period where

"The symptoms of Mr. Hunter's complaint," says Sir Everard Home, "for the last twenty years of his life, may be considered as those of Angina Pectoris; and form one of the complete histories of that disease upon record. Each symptom was described at the time it occurred, and either noted by himself or dictated to me, when Mr. Hunter was too ill to write; they will be found therefore more accurately detailed than in ordinary cases.

"Mr. Hunter was a very healthy man for the first forty years of his life; and, if we except an inflammation in his lungs in the year 1759, occasioned most probably by his attention to anatomical pursuits, he had no complaint of any consequence during that period. In the spring of 1769, in his forty-first year, he had a regular fit of the gout, which returned the three following springs, but not in the fourth; and in the spring of 1773, having met with something which very forcibly affected his mind, he was attacked, at ten o'clock in the forenoon, with a pain in the stomach about the pylorus: it was the sensation peculiar to those parts, and became so violent, that he tried change of position to procure ease; he sat down, then walked, laid himself down on the carpet, then upon chairs, but could find no relief. He took a spoonful of the tincture of rhubarb with thirty drops of laudanum without benefit. While he was walking about the room, he cast his eyes on the looking glass, and observed his countenance to be pale, his lips white, giving the appearance of a dead man: this alarmed him, and led him to feel for his pulse; but he found none in either arm. He now thought his complaint serious. Several physicians of his acquaintance were then sent for, but could find no pulse; the pain still continued, and he found himself at times not breathing. Being afraid of death taking place if he did not breathe, he produced the voluntary act of breathing by working his lungs by the power of the will; the sensitive principle not being in the least affected by the complaint. In this state he continued for three quarters of an hour, during which time several attempts were made to feel the pulse but in vain: the pain, however, at last lessened, and the pulse returned, although at first but faintly, and the involuntary breathing began to take place. While in this state he took Madeira, brandy, ginger, &c. but did not believe them of any service, as the return of health was very gradual; in two hours he was perfectly recovered."

Mr. Hunter suffered frequent relapses of spasmodic and inflammatory complaints, with which he was troubled and which ultimately brought him to the grave. Sir Everard informs us, that, "on the 16th of October, 1793, when in his usual state of health, he went to St. George's Hospital, and meeting with some things which irritated his mind, and not being perfectly master of the circumstances, he withheld his sentiments; in which state of restraint he went into the next room, and turning round to Dr. Robinson, one of the physicians of the hospital, he gave a deep groan and dropt down dead!" His remains were interred in the vault under the parish church of St. Martin's in the Fields, attended by a few of his oldest medical friends.

"At the time of his death he was in the 65th year of his age, the same age at which his brother the late Dr. Hunter died."

Such was the end of two brothers, who raised the anatomical school of London to its present celebrity, and

in their museums erected their own monuments. Both arrived in London with no capital but genius, industry and integrity; the first almost without introduction. Each arrived nearly at the same age, finished his career in the same time, and each in the arena of his own labours. The first struck with the approaches of death in his own theatre, and in his expiring moments, anxious to return, that he might communicate a physiological fact he never could ascertain till then.—The other expiring on the spot.

Mr. Hunter was below the middle stature, well formed for muscular exertion, somewhat high in the shoulders, which were rather forward. He was naturally active and capable of great exertion, mental and bodily. His countenance was open, and though strongly impressed with thought, was by no means habitually severe, but softened into tenderness, or sparkled with brilliancy, according to the impression on his mind. Sir Everard Home remarks, that Lavater, on seeing his print, remarks "that man thinks for himself."

Mr. Hunter in his temper is said to have been "very warm and impatient, readily provoked, and, when irritated not easily soothed"—with all these the highest encomiums are due to his virtue, his talents and the kindness of his disposition. Mr. Clift, who was with him during the latter period of his life, speaks of his temper as peculiarly amiable. "His disposition," says Sir Everard Home, "was candid and free from reserve even to a fault—he hated deceit and was above every kind of artifice, he detested it in others and too openly avowed his sentiments—in conversation he spoke too freely, and sometimes harshly of his contemporaries; but if he did not do justice to their undoubted merit, it arose not from envy, but from a thorough conviction that surgery was yet in its infancy, and he himself a novice in his own art, and his anxiety to have it carried to perfection made him think meanly and ill of every one whose exertions in that respect did not equal his own.

In the single character of the immortal John Hunter, we find united a genius unrivalled in a science the most important to our happiness in this world: a softness of temper that dwelt with such ecstacy on the milder virtues, as to "shed tears at the recollection of acts of gratitude and compassion:" a contempt of danger, which for the security of others, exposed him, unprotected, to two most ferocious animals; and a contempt of wealth, with a sense of rectitude, which, in assisting others, brought him into difficulties that effected his own health—virtues which, though they might be sometimes obscured by ill health and human infirmities, were cultivated to the last; whilst nothing ever lessened his ardour in acquiring, or his readiness in imparting useful knowledge.

We shall conclude this hurried sketch of the life of John Hunter, in the words of his latest biographer, (Joseph Adams, M.D.) regretting at the same time, that our limits have caused us to pass over a variety of interesting and important matter of fact which, doubtless, to those who have yet to learn the intrinsic worth of such a character, could not fail to prove highly gratifying and instructive.

"Some rumours," says Dr. Adams, "which I have heard and read, oblige me to add a few words. I have heard Mr. Hunter described as a materialist. If by this is meant, that he never made any inquiries but into matter, most reasonable men will be satisfied that his inquiries on that subject were so accurately conducted: if it implies that he had any doubt of a first cause, known only by the effects of unsearchable power and goodness, nothing can be more unjust than such a suggestion. His

whole philosophy, as we have invariably found, was guided by the first of these considerations, and all his works abound with references to the latter. If, not having directed his enquiries to the subject, he had not the same conviction of revelation, we can only regret that one, whose prospects were in other respects so fair, should not have enjoyed a foretaste of an hereafter; and, if such a conviction would have taught him to set less value on the transitory events before him, how much would the world have gained from the prolongation of his life by such tranquillizing reflections."

Dr. Heinrich Spitta's Surgical Remarks.

(Concluded from page 73.)

A woman, aged 30, had for some time had a femoral hernia on the right side, which occasionally came down, but was easily reducible. One morning she felt suddenly colicky pains, with an inclination to go to stool. A portion of intestine had probably come down at this time, and more was protruded by the attempts at evacuation, the tumour becoming quite irreducible, and very painful. She continued in this state until evening, and then came to the Hotel-Dieu. The tumour was very tense and painful, but vomiting had not yet appeared. The objections of the patient, and perhaps the recollection of some cases in which enteritis proved fatal, although the operation had been performed a few hours only after the occurrence of strangulation, induced M. Dupuytren to wait until the morning, and to order a bleeding, a warm bath, and a tobacco clyster. In the night, the pain in the abdomen became extremely violent; the patient, in a state of desperation, attempted to reduce the hernia, and, all at once, succeeded, but without relieving the symptoms. It was suspected that the sac and hernia had been returned together, without removing the stricture. A second bleeding, and a warm bath, were ordered, but although the pains were thus diminished, no evacuation took place. By the use of repeated injections, and large doses of calomel, first flatus, and then fæces were expelled with relief to the symptoms.

Even at the time that the patient left the hospital, a large and rather painful swelling remained in the right iliac fossa, which was probably formed by the hernia included in its sac.

A man had been long subject to a femoral hernia, which sometimes descended, but could be easily reduced. The parts protruded on the morning of Feb. 16, 1821, and his own attempts failing, the patient entered the Hotel-Dieu in the evening. M. Dupuytren found a hard tumour, which resisted the taxis, and was attended with pain, constipation, nausea, and vomiting. The man obstinately refused to submit to an operation, and wished for the employment of purgatives. In the existing state of the intestinal canal, these were considered as dangerous, and, instead, he was twice bled, and put into the warm bath. In spite of these, and similar measures, the symptoms increased during the next day: the hernia became so painful as not to allow the slightest pressure; the abdomen was distended, and the course of the intestine, filled with flatulence and fæces, could be traced by its external protuberance, the nausea and vomiting became more urgent, the pain in the abdomen increased, and it was not until the morning of Feb. 22, when his sufferings had reached the highest pitch, that the patient consented to an operation.

Persuaded that gangrene must have taken place in the protruded parts, and that their reposition would be injurious, M. Dupuytren cut directly into the tumour, with the view

of making an artificial anus, the most favourable result that could be looked for. When the sac was divided, no fæces escaped, but a very offensive fluid, such as is commonly found near gangrenous parts. The omentum next appeared, of a greyish yellow colour, and in a state of gangrene; the greater part of it was cut away, without any bleeding. Behind it lay the strangulated intestine, which appeared gangrenous, and discoloured; a few spots only seemed not to be dead. It was opened with scissars, and according to M. D.'s usual practice, an attempt made to pass a female catheter into the upper portion, in order to facilitate the escape of fæces. This was rather difficult, from some mechanical impediment, but was at last accomplished, when a discharge of fæces began, and continued from 8, *a. m.* to 2, *p. m.* to the amount of five or six pounds. The patient felt much relieved, the symptoms diminished, the abdomen sunk considerably, he slept for some hours in the night, and on the following morning, complained only of great weakness. He took nothing but gum-water and weak broth. Constant evacuations were kept up by injections, and the abdomen fomented. The pulse continued soft and frequent, the countenance sunk hourly, and assumed the appearance characteristic of serious injury to the abdomen. The return of colic, with nausea and hiccough, gave reason to fear that its diminished violence depended less on the absence of disease than on the diminution of the vital powers. The extremities became cold, a clammy sweat broke out, the pulse became still more frequent, and he died Feb. 26, four days after the operation, and eleven from the occurrence of strangulation.

The dissection on the following day shewed the omentum and the upper surface of the intestines covered with purulent matter, which was also effused in the dependent parts of the abdomen. Almost the whole course of the intestines was of a brown red colour, and much distended; the omentum was in part gangrenous, in part inflamed, and adherent to the protruded end of the intestine. Fæculent matter was effused into the bag of the peritoneum, although tne utmost pains had been taken to prevent it. This unfortunate accident takes place more easily, in proportion as the strangulation and mortification of the intestine are situated nearer to the internal opening of the abdominal or crural rings; the reverse affords a more favourable prognosis in the formation of an artificial anus. In the neighbourhood of the hernia, the intestines were twisted in a spiral form, thus opposing a second obstacle to the course of the intestinal contents, either in the natural manner, or through an artificial anus. This condition was probably produced by the violent spasm of the colic, and the antisperistaltic motions which took place after strangulation, and is a point which has not hitherto received sufficient attention.

From Paris and Fonblanque's Med. Juris.

(Continued from p. 71.)

The anatomical dissection, however, is the most likely to throw light on the causes of death in particular cases, and requires the utmost care and attention in the performance. We do not think it necessary to give the directions which the authors recommend in the execution of the operation, supposing it to be a part of the profession with which most surgeons must be sufficiently acquainted. Under the head of dissection may be included the examination of wounds and other superficial injuries; and as the authors correctly remark, the discovery of what may appear sufficient to account for death in one part, ought never to prevent our proceeding with the investigation of the rest. In the case of a female, the organs of generation should

always be inspected; as very important conclusions may be deduced from the discovery of an impregnated or unimpregnated uterus, from the state of the ovaria, and the absence or presence of corpora lutea.

Infanticide.—In cases of alleged infanticide, the objects to which the practitioner should direct his inquiries are to ascertain, 1st, Whether the child was born alive? 2d, Whether its death was the result of natural causes; of wilful murder; or of negligence and abandonment? Some remaining questions, as whether the negligence causing death be criminal or accidental; and as to the relation of the appearances in the supposed mother, with the fact of parturition, are either included in the above, or have already been treated of.

To ascertain whether a child was born alive, we must in the first instance inspect the body of the infant; we may thus learn whether it had arrived at such a degree of maturity as to render it capable of maintaining an independent existence. If the contrary can be proved, the charge of infanticide is at once done away with: for this reason, it would be desirable to fix a period previous to which a child should not be supposed capable of supporting extra-uterine life. The authors consider this period to be the end of the seventh month, though they allow that a diversity of opinion exists on the point. The difficulty of perfectly ascertaining the age of a fœtus is considerable, and very far from being removed, by the many ingenious modes which have been proposed for determining it. At best, the evidences supply us only with grounds for forming a probable conjecture. The principal information is to be derived from the weight, bulk, and length of the fœtus, from the progress of ossification, and from the state and conformation of certain parts, as the head, brain, liver, heart, testicles, and pupillary membrane.

The body must be examined, for the purpose of tracing wounds, bruises, and other marks of injury. Dissection must then be performed, and the great cavities carefully examined, for the purpose of detecting the appearances of disease or injury. The examination of the lungs, it is well known, is of particular importance in such cases, and practitioners are now well acquainted with the inference to be drawn, not only from the ancient hydrostatic test, but also from that known by the name of Ploucquet's. Since the argument of Dr. W. Hunter, in his Essay on the Uncertainty of the Signs of Child Murder, the hydrostatic test has fallen into a great degree of discredit than it seems to deserve; the exceptions have in fact been substituted for the general law. So far as this extended, that in the report of a trial, within the last two years for child-murder, the presiding judge is reported to have said that this test was now deservedly exploded, and the inferences from it no longer attended to. Many of the statements of Dr. Hunter are notoriously incorrect, such for instance, as that the lungs will swim as readily in water when the child has made one gasp, as if it had breathed longer. It is now admitted that the distention of the lungs is not so sudden, and that respiration is gradually rendered more perfect. In giving an opinion, we should of course be guided by the extent to which the lungs are found distended.—That the lungs will float, when artificially inflated, is true; but by the application of other tests, this cause of fallacy may be in a great degree removed; for instance, we should find by Ploucquet's test, that the absolute weight of the lungs was much disproportioned to that of the body; and it should be remarked, that in vindicating the hydrostatic test, we by no means recommend it as exclusive or infallible, but merely as one among other means

of acquiring information, each giving and receiving mutual assistance. It is true again that the lungs may float in consequence of putrefaction; but in the first place, air evolved by putrefaction causes a different appearance from that which has been inspired; secondly, putrefaction is of very late occurrence in the lungs; and thirdly, as in the former case, putrefaction would add nothing to their absolute weight.

Of Ploucquet's test, though founded on less certain grounds than he supposed, the same remark may be made in answer to the author's objections to its adoption, that though by no means positive in its conclusions, and liable to considerable variation, yet when combined with the employment of other means tending to the same end, its indications are much increased in value. In a word, we think that with the appearances of putrefaction or the contrary, a careful dissection, combined with the employment of these two tests, cannot fail, in most cases, to throw a considerable light on the question of the occurrence of respiration, and on the extent and duration of that function.

(*To be continued.*)

The SECALE CORNUTUM, or ergot or rye is likely to become a favourite medicine, not only in puerperal convulsions, but also, it appears, in chronic diarrhœa. In the last named complaint, attended with suppression of the menses, which occasioned hysteria, head-ach, and vertigo; it was given by Dr. Stout, of Bethelem, Pensylvania, after other emmenagogues had failed, in the dose of six grains three times a day. It produced uneasiness in the uterine region, without restoring the menstrual discharge: on the diarrhœa, however, it had a very salutary effect, and ultimately was the means not only of checking, but of curing a very obstinate case of chronic diarrhœa. The menstrual discharge was subsequently restored by the use of the tincture of cantharides.

Dr. S. is of opinion, as far as his observations have extended relative to the modus operandi of the secale cornutum, in curing the above-mentioned disease, that it did not produce this effect from any astringent property it may possess, nor from any direct action on the bowels; but, in all probability, from an impression made on the stomach, which by sympathy excited a new action in the uterus, that counteracted the morbid one in the intestines.

In a case of puerperal convulsions that came under the treatment of Dr. Brinckle, the ergot was administered, after the free use of the lancet, and after other remedial means had failed, with decided advantage. At 10 o'clock ten grains were given and repeated every half hour. In twenty minutes after the first dose, both the force and efficiency of the uterine action were increased; and at half-past 11, the child was born. The patient had no convulsions after the ergot was administered: but, notwithstanding the decided advantage of the ergot, in this case, Dr. B. expresses a doubt whether he should resort to it in puerperal convulsions, until the lancet had been actively employed; as, he observes, if there be much action, he has always found the ergot to operate more promptly and powerfully when preceded by venesection. "Nor," continues he, "do I think it would be altogether proper to prescribe it until labour is pretty considerably advanced, and the os uteri dilated. Where convulsions supervene, in a case of commencing parturition, we should endeavour to suspend the action of the uterus, by boldly using the lancet as far as may be expedient, and then resorting to opium and camphor. This plan succeeded in a case which occurred four days after that which has just now been related. The pains were completely arrested,

and, with them, the convulsions. In a week afterwards, labour re-commenced, and my patient was delivered without the recurrence of the convulsions, or the accession of any untoward circumstance." *(Philadelph. Journal, May*, 1823.*)*

The following effects of irritating substances on the functions of the intestines, when rubbed on the lower regions of the spine, were produced by the external application of tartar emetic; as related by James King, Esq. Surgeon. "A young man, aged 25, was seized, after exposure to cold, in the month of April, with a severe rheumatic affection of the dorsal portion of the spine, for which bleeding and other remedies, usually found of service in similar cases, were resorted to without any benefit. By the advice of a medical friend, I was induced to rub tartar emetic ointment on the surface of the part affected. Two days after the first application of this ointment, he informed me that he had been troubled during the night with a severe purging, which he attributed to the rubbing. At the same time, not being aware that tartar emetic, when applied externally, would produce such effects, I ridiculed the idea, and attributed it to some derangement of the intestinal canal. I ordered the ointment to be continued till next day, when I was informed that the purging had been still more severe than it was before the last visit. I now began to suspect that the emetic tartar might be received into the system by means of the absorbents, or act through the medium of the nerves, so as to produce this effect; but to obtain a more satisfactory proof *(here Mr. King should have ordered the ointment to have been rubbed on the region of the stomach, and he would have seen that nausea and consequent vomiting if persisted in would have been excited)* I ordered it to be discontinued for three days, during which time the bowels resumed their natural action, as he had only one stool each day! I again commenced the use of the ointment, and again it excited a similar influence over the alimentary canal, which obliged me to give up its use entirely."—*(Med. Repos.)*

Mr. King gives another case, nearly similar but not so violent in effect. Still, independent of the stimulating effects of the tartar emetic, we are aware that, in delicate constitutions, mere mechanical friction on the spine will excite the action of the intestines. We nevertheless perfectly coincide with Mr. K. that were it satisfactorily proved that purgatives, when prescribed in this way, were uniform in their operation, the advantages would be great indeed, in the plurality of cases.—Ed.

Medico-Chirurgical Transactions, published by the Medical and Chirurgical Society of London. Vol. VII. Part II. No. I.

(Continued from p. 77.)

Observations on Tetanus.—By D. I. H. Dickson, M. D., Physician to the Fleet.—This paper is particularly directed to the investigation of the early stage of the symptoms, and the means of prevention. Dr. D. conceives that a peculiar condition of the intestinal canal is one of the first morbid symptoms, and that an assiduous use of purgatives may have the effect of removing the tendency to the disease: to which course, in particular cases and constitutions, he would add bleeding. The disease is said to have been less prevalent of late years in the West Indies than formerly, a circumstance which is attributed to the greater attention that is now paid to the evacuation of the bowels. In the less acute form of the disease, the liberal use of spirits and opium, when employed early, is frequently efficacious, but not in the *more* acute form. Of the numerous cases which occurred during the cam-

paign in Spain, very few terminated successfully; the principal remedies employed were blood-letting, purging, opium, and digitalis. The following paragraph may deserve to be quoted:—

"I trust I am therefore justified in inferring that to the improvements in the medical and surgical treatment of wounds; in cleanliness and ventilation, avoiding at the same time exposure to currents of cold air, or sudden changes of temperature; in fine, to superior comforts, diet, and accommodation; but particularly to the greater attention paid to the state of the bowels, may be attributed the great infrequency of tetanus of late in the West Indies, when compared with former wars."

The essay concludes with four valuable cases by Dr. M'Arthur, with dissections; from which the writer infers that the disease 'depends on, or at any rate is attended by, inflammation of the abdominal viscera;' for whether it be the original cause, or only a consequence of the disease, is a question which future experience and dissections can only determine. He observes that 'in severe instances of the opisthotonos, no doubt the pressure of the abdominal muscles on the contained viscera might induce inflammation, for when the muscles of the neck and back are thrown into contractions, the abdominal muscles act as antagonist muscles with great violence; and the abdomen, during the continuance of the spasm, feels hard like a board under the hand.' The inflammation assumes a very different character from that of enteritis; no adhesions being formed from effused coagulable lymph, nor any formation of pus.

A short paper by Dr. Whitlock Nicholl, gives an *Account of a Case of that curious Imperfection of Vision*, in consequence of which the patient is unable to distinguish colours. The report is similar to others that have been occasionally laid before the public; and no attempt is made to account for the fact.

In the next memoir, Dr. Henry Dewar calls the attention of the Society to the *Treatment of Sinuous Ulcers*.—After having remarked on the different methods of treatment that have been employed for their cure, the author adverts to that of compression, and observes that it has seldom been applied in a regular or scientific manner. He thinks that it is attended with most conspicuous benefit in 'extensive sinuses among the muscles of the thigh;' adverts to the plans of treatment usually adopted; states the defects of them; and then proceeds to give an account of a case in which he employed a different mode. It consists fundamentally in a pressure greatest at the remote part, and gradually declining towards the outlet of a sinus,' by which a free discharge is given to the fluid, and the healing process commences at the extremities. Dr. Dewar afterward enters into a critical examination of the writings of preceding surgeons, and inquires how far a plan of treatment, similar to the one which he recommends, had been practised by any of them.

Some Observations on a Species of Pulmonary Consumption, very frequent in Great Britain. By A. P. Wilson Philip, M. D.—Though this species of consumption is said to be very frequent in Great Britian, Dr. Philip thinks that it has not been sufficiently noticed or discriminated by medical men in general. From his description of the symptoms, however, (which is given with considerable minuteness and even prolixity,) the disease in question appears to us to be nothing more than the common pulmonary phthisis, occurring in an individual who was subject to disorders of the digestive organs; thus occasioning two sets of symptoms, which may exist at the same time, but which have no particular connection with each other.

Any thing that deranges the functions of the stomach and bowels so much weakens all parts of the frame, that it is not surprizing if, in those who are predisposed to consumption of the lungs, this complaint should be brought on by dyspeptic affections: but we perceive no other reason for speaking of it as a dyspeptic phthisis, or for describing it as a peculiar species of disease.

Case of Inguinal Aneurism. By J. S. Soden, Esq. of Bath.—This aneurism was cured by tying the external iliac artery: the operation being performed 'according to the mode recommended by Mr. Abernethy, except that only one ligature was used, very thin, and of silk.' No untoward circumstance of any kind occurred, and the cure was completed after a moderate length of time.

Facts illustrating the Effects of the Venereal Disease on the Fœtus in Utero. By William Hey, Esq. of Leeds.*—An extensive practice in midwifery for 57 years gives a kind of oracular authority to Mr. Hey's judgment, and they are peculiarly valuable at a time when so much confusion prevails in opinions on the subject on which he writes. He does not hesitate to declare his conviction of the possibility of a proper syphilitic infection being transmitted from a father to the fœtus, 'after all symptoms of the disease have been removed, and he is judged to be in perfect health;' and that, under these circumstances, he is capable of communicating the disease to his wife. Although satisfied of the fact, Mr. Hey confesses himself unable to account for it by any plausible hypothesis.

The volume concludes with an interesting paper by Dr. Marcet, *on the Medicinal Properties of Stramonium:* whence we learn that the extract of the *Datura Stramonium* relieves 'acute pains of various kinds more effectually than any other narcotic medicine.' The stramonium, or thorn-apple, had been principally known in this country as a vegetable poison, inducing a train of violent symptoms, which seemed to indicate that its action was principally on the nervous system; it was indeed partially known to the Germans, as an article of the materia medica: but its specific effect in relieving pain does not seem to have attracted attention; and the same remark also applies to some experiments that were performed on it in America. The preparation which Dr. Marcet employed was an extract made from the seeds, and this he thought was decidedly more powerful than an extract from the whole plant. He gives this account of its effects, when administered in small doses:—

"The most common effect in cases of chronic disease, attended with acute pain, is to lessen powerfully, and almost immediately, sensibility and pain; to occasion a sort of nervous shock which is frequently attended with a momentary affection of the head and eyes, with a degree of nausea, and with phænomena resembling those that are produced by intoxication; to excite in many instances nervous sensations, which are referred to the œsophagus, or bronchiæ, or fauces, and which sometimes amount to a sense of suffocation; to have rather a relaxing than an astringent effect upon the bowels; to have no marked influence upon the frequency of the pulse, though in a few instances it has appeared to render it somewhat slower; to produce but a transitory and inconsiderable dilatation of the iris and pupil; and to have but little immediate tendency to induce sleep, except from the state of comparative serenity and ease, which generally follows the symptoms I have just described.

"In some instances, however, as will be seen on perusing the annexed

* Some account of the life and writings of this worthy character, will be given in our next and succeeding numbers.

cases, the beneficial effects are obtained without the patient experiencing any of the uneasy sensations above-mentioned; while in a few others, the unpleasant consequences of the medicine have been experienced without any subsequent benefit."

Dr. M. then relates fourteen cases in which the stramonium was employed; and he sums up the results in this paragraph :—

"Thus from the facts I have just laid before the Society, (the only ones that have yet come under my own observation respecting the effects of stramonium, it would appear that in four cases of sciatica decided benefit was obtained. The efficacy of this remedy was still more strongly marked in two cases of sciatica combined with syphilitic pains. It failed entirely in two instances of diseased hip-joint. It produced considerable relief, as to pain, in a case of supposed disease of the spine followed by paraplegia; and likewise in one of cancer of the breast. It allayed materially the pain occasioned by an acute uterine disease. It was of great and repeated utility in a case of tic douloureux; its utility in a second case of the same description was very doubtful; and in a third, it entirely failed."

PRINCE HOHENLOHE,

*The German Conjuror and Quack Doctor.**

Where are ye now Drs. E—dy and R—ce "of London!!!" Of what use now are all your PUFFS and *crackers*—your long-winded stories in praise of *infallible* nostrums—your tricks and gibberish—your wholesale and retail fustian and obscenity that have so long and so pitylessly pestered and disgusted the town? The GULLS are called away to another quarter. '*Piccadilly*' in future will resemble the park in one of the bleak days of December—and '*Soho*' like a lamb in the pound the night after sheep-shearing, will fret itself to death.

The long-tottering 'medical board' has at length vanished like a "baseless fabric"—the COOPERS and the MONROES have *doft* the lion's skin; and the columbine of the farce, as if in anticipation of the calamity, just made his *exit* in time to avoid the *dun* and uproar of the house.

Messieurs Gossip and Co. are taking shelter under their *formidable* ÆGIS; and holding forth in a long non-medical commentary, on the abuse of miracles, particularly if allowed to be imported, duty free, by german princes: and, moreover, they maintain that, unless the alien act be amended by the introduction of a new clause of their own framing, to prevent foreign miracles from being smuggled into the realm, it will be utterly impossible for them to save their bacon—consequently, the *Ægis* being no longer able to shield neither them nor the '*domus et placens uxor*,' they must all go to pot together.

Dr. Solomon's balm of Gilead is become a mere drug, that unless some restriction be put on the miracle-monger he must return to his 'old trade of basket-making.' Having always a number of casks on hand, it must prove a dead loss from the utter inability of Solomon, with all his wisdom, to separate the cantharides from the brandy to make the latter fit for use.

The JORDANS, and their lately invented '*medical establishment*,' are about to be *bagged* with the rest of their *old clothes*.—N. B. They have not *shaved* since the Prince performed his last miracle.

Dr. *La Merde* and his '*medical establishment*,' he persists in not moving a foot out of it. As, in his

---

* We are not partial to *nicknames*—but certainly the Prince comes under these appellations in the very meaning of the words. First, he is a conjuror because he deals in legerdemain, and as every irregular practitioner is ycleped a quack, so is Prince Hohenlohe of this description.

opinion, he might go farther, and fare worse. The house is his own.

Leake's patent pills are under the process of sublimation to procure the calomel in order to be reverted to its primitive state. An eminent wholesale barometer maker, in the Strand, has contracted for the lump. The residue, which will chiefly consist of crumbs of bread, is to be made into fifty peck loaves, to be sold, at a reduced price, to any one who chooses to buy them.

A number of other QUACKS are on the WADDLE; and several Aberdeen diplomas are in the market at something less than second-hand prices—plenty of sellers but no buyers. It is said, however, that a certain rich jew in the city intends to speculate freely in these goods, in the hope that next session of parliament an act will be passed prohibiting, under severe penalties, the importation or encouragement of catholic buffooneries and miracles of every description; when, it is expected, they will again fetch their original *value*.

Prince Hohenlohe is daily gaining notoriety in the miracle-line—his fame increases—his all-healing standard is unfurled; and, from the recess of his closet, by dint of two or three words of command, '*presto* quick fly and begone,' he ministers the health-restoring balm, far and near, without fee or reward.

The days of pill-swallowing and draught-gulping, clystering, blistering, acupuncturing, &c. are gone by—the dumb stun your ears with their vociferations—the blind stare you out of countenance—the deaf, if a mouse but wag its tail, prick their ears like a trooper at the sound of a bugle—the cripple throws aside his crutch and capers like a mountebank, —and all at the word of command of the pious potent Prince Hohenlohe.

If the Prince only number his *beads* and mutter an *ave maria*, disease vanishes at the sound of his orisons—the lame, the lazy, and the blind, alike feel his influence—the magic of his mystic mummery controuls the destiny of mankind. His mighty prowess has already reached the emerald isle, although first displayed at Newhall; and Erin's hardy sons now look over their mountains and bogs, with "long and eager gaze," anxious to meet the benediction of a German soldier with as much rapture, credulity and devotion, as if the second advent were at hand.

Where this all-curing doctor intends to stop, or to what extent he purposes *to practice his art*, requires no very great depth of penetration to foresee—for assuredly, as long and no longer, as a solitary infatuated being can be found weak-minded or silly enough to become the tool of his designs, as long will this fanatical humbug stick to his vocation, and continue to disseminate his monastic superstitions; till, at length, by dint of repetition, he will actually imagine himself the miracle-worker he only now pretends to be. Nor should we be the least surprised to hear, in the end, that Mr. Hohenlohe had *miraclised* himself into a straight jacket, and that he had ended his days in a madhouse.

The days of priestcraft and superstition, it was hoped, were fast fleeting away, even in those countries where religious deceptions have been most fostered and practised.

As far back as March last, when the Newhall convent affair blazed forth like a streaming meteor from the cloister to dazzle the more steady intellectual ray, we received the following letter from a correspondent, which was only suppressed at the time in consequence of another having been previously inserted on the same topic. We now lay it before our readers, not only as being, in our humble opinion, very appropriate at the present miracle-working moment, but inasmuch as it contains some excellent and spirited animadversions on a subject rife with danger to the existing as well as to the rising generation.

To the Editor of the Weekly Medico-Chirurgical and Philosophical Magazine.

Mr. Editor.—Although not of the medical profession, the third number of your Magazine happening to fall into my hand, and I cannot withhold from your readers my deep regret that a respectable character, whom I have known nearly thirty years, I mean Dr. ——— of ———, should, in a moment not sufficiently guarded, have lent his high name and authority to a cause so unworthy of him, and so likely to be fraught with most injurious results to the cause of the protestant religion, not only in our own country, but on the continent, where it has to struggle with difficulties unknown in this happy isle.

For any man to believe, that a miracle can be wrought by others in this day, is of itself an awfully convincing proof, that he is ignorant of the scriptures, and that his own mind is likely to become a prey to the wildest chimeras.

It is not possible, Sir, that the cause of popery should stand against that strong body of light which is now breaking in upon the nations: this the papal hierarchy now feels more evident than ever; therefore something must be done, if it may be, to uphold the tottering fabric. And what so probable as miracles, if they can prevail with the nations to believe them! This may be considered as the *ne plus ultra* of their attempt; but be assured, Sir, that we have no reason to fear the result of the appeal; for the existing state of things is most decidedly against them. Such subterfuges may have done in the dark ages of monkish and apish superstition and ecclesiastical domination; but I trust those times are gone by, never more to return. We must not consider these attempts as new: they have been tried many times; it is but the revival of old scenes: nor must we be surprised, if some are led away by such things; for what age of the world can we refer to, but what some could be found who would believe things, the most monstrous and absurd, to those who were cautious and wise enough to look at them through no distorted medium? The love of novelty and of things strange, though too characteristic of many, is an evil against which increasing years, and a view of its great evils, should steadily guard us.

Had your pages, and my time permitted, nothing would have given me greater pleasure, than to have traced before your readers, the impressive and clear intimations given us in the scriptures of truth, respecting what the most enlightened and able expositors of the bible have ever considered as a portraiture of the church of Rome: whilst I beg of those who feel interested in these things, that they will look into the second chapter of Paul's second epistle to the Thessalonians, for the account at large, and to the judicious Dr. Doddridge for his exposition of the same. I shall only adduce here a small part of the description, leaving it to speak for itself. "*For the mystery of iniquity doth already work—whom the Lord shall consume with the spirit of his mouth, even him whose coming is after the working of satan, with all power, and signs, and lying wonders —and for this cause God shall send them strong delusion, that they should believe a lie.*" If the popish church be willing to be tried by such a test, instead of being guilty of blasphemy by pretending to work miracles, there the protestant church is ready to meet her. Let us have the authority of the apostles, instead of that of popes, to decide, and we can cheerfully leave the result.

At the same time, protestants cannot be too much on their guard against those stratagems which we now, more than ever, expect to abound among the partisans of popery, by which they will seek to beguile unwary souls. Though these remarks were occa-

sioned by your own work, Mr. Editor, yet as they are more theologico, than "medico," I ought to apologise for offering them for your pages: yet, trusting, that you will deem their tendency salutary, I shall be happy in your giving them a place among your miscellanies.

Your's, J. C.

Vaccination.

A child, aged about twelve months, was vaccinated in the arm. No inflammation followed. In about eight or ten days, therefore, the operation was repeated, and on the same arm. This attempt was successful, and the child passed regularly through the disease, the first puncture remaining all the time quiescent.

In about *six months*, however, this puncture inflamed spontaneously; and the physician who was called in, asserts, that he found on the part a well-formed vesicle, "presenting in every way the satisfactory appearances we expect to find about the tenth or eleventh day after the insertion of the vaccine lymph."

"He adds, "the cicatrices of both pocks now remain, and are equally well defined."—*(Lond. Med. Jour. Feb.* 1823, p. 122.)

When Mr. Pearson transmitted to China some of the vaccine lymph, he sent with it a pamphlet, in the Chinese language, containing directions for its use.

Of this pamphlet an edition was published in China soon after its arrival, but expurgated; so that nothing appeared from which it could be learned that vaccination was not a Chinese discovery!—*(Annals of Philosophy, Feb.* 1823, p. 150.)

Malformation in a Male Infant.

Mr. Ashford, of Hinckley, has favoured us with the following case:—Mrs. Holtham, of that place, was delivered, in June last, of twins: the first child, a female, was born perfect: the second, a male, lived about six weeks. It was observed that the umbilicus was but a short distance above the pubes, immediately under which, upon the abdominal surface, terminated the ureters. The vesica urinaria was wanting; the glans penis was exposed, and resembled a cone flattened on one side; there was no appearance of urethra. The testicles were situated on each side, just behind Poupart's ligament, and were in themselves seemingly perfect.—*(Med. Phy. Jour.)*

M. Carminati on Colchicum as an Anti-Phlogistic.

This is merely a repetition of the experiments of Mr. Haden, with the bulb of the colchicum autumnale, in cases of acute inflammation, though Professor Carminati seems to claim it as his own discovery. He prescribes it under the form of oxymel of colchicum. In three cases of acute peripneumony, with serous effusion and suppression of urine, he was successful in subduing the disease by this alone, which he prescribed in the dose of a scruple every three hours, in a cooling draught, increasing gradually to two, and four scruples, and even to two drachms at once, and two or three ounces per day. His success in these cases led him to try it in dropsies, both general and partial, and in organic inflammation, in subjects of different age, sex, and temperament; and he assures us that the effects were beyond his anticipation.—*(Memor. Instit. Milan.)*

HOSPITAL REPORTS.

Guy's Hospital, Aug. 26.

STRANGULATED HERNIA, (*Oblique Inguinal.*)—Thomas Miller, aged 29, a seafaring man, was admitted this day with hernia, which had been previously unreduced for three days. The symptoms were of the ordinary description; viz. twisting pain in the abdomen—tightness across the umbilicus, nausea and vomiting—constipation of the bowels. The hernia about the size of a duck's egg—very hard

and tender—the surface of the scrotum inflamed.

Treatment.—Twenty-four leeches were applied, which bled freely, and were further promoted by hot fomentations—an enema was thrown up which soon returned with some fæces—although the patient was faint from loss of blood, every attempt at reduction proved ineffectual—the freezing mixture was then applied with no better success. The warm bath was tried, which produced fainting, when the taxis was again tried with the same results.

27th, 7 A. M.—Pulse sharp and quick—pain in the abdomen increased with (not constant) sickness and occasional hiccups. The operation was proposed by Mr. Key, but the patient refused.

2 P. M.—Sir Astley Cooper applied the taxis but without effect; and advised the following enema—pulv. tabacci 3j aquæ ferventis Oj, which was thrown up at twice, but soon returned without being accompanied with fæces—distressing sickness—hiccups. Pulse before the enema 114, afterwards 60. The enema produced great prostration of strength and giddiness—great depression of the countenance.

6 P. M.—Patient expressed himself quite easy—sickness and hiccups subsided—still refuses the operation. The hernia very tense, and the scrotum livid—hot fomentations continued—pulse 90.

28th, 10 P. M.—Quite easy—no tenderness of the abdomen—the sac very hard and tender—no stool.

7 A. M.—Complains of pain in the loins—great tenderness and a sensation of stricture across and below the umbilicus—excessive tenderness at the mouth of the sac—no stool—passed urine of a natural colour—pulse 82 and sharp—breathing slightly affected—nausea.

11 A. M.—Mr. Lucas proposed the operation but was refused—the scrotum is much inflamed with great tenderness of the hernia, and pain in the course of the inguinal, extending to the loins—12 leeches were applied, and the bleeding promoted by hot fomentations.

5 P. M.—Patient still refuses the operation—he wished for a dose of house physic, which was given to him, but thrown up again.

11 P. M.—Very faint—depression and paleness of countenance—excessive pain across the umbilicus and hernia. Hiccups—no sickness—pulse thready and 104.

28th, 9 A. M.—Pulse scarcely perceptible—great prostration of strength—no pain except occasionally at the umbilicus—with intermediate sickness and hiccupping.

12 A. M.—Operation performed by Mr. Lucas—the sac contain omentum and intestine—the latter in a sphacelated state. The omentum was folded round the intestine forming part of the stricture. The contents of the hernia not returned into the abdomen. Mr. Lucas directed the patient to have anything he desired—wine was given to him, but it would not remain in the stomach—felt disposed to sleep—pulse 80 and feeble.

6 P. M.—Every thing previously taken thrown off the stomach—the countenance, nevertheless, with the pulse, rather improved.

10 P. M.—Extremities cold and the whole body covered with profuse perspiration—countenance sunk—pulse scarcely perceptible.

29th, 10 A. M.—Pulse hardly perceptible and about 90—tongue furred—vomiting—no stool—great prostration of strength—slight pain in abdomen.

2 P. M.—Same symptoms—does not appear benefitted by the operation—ordered to be well supplied with wine.

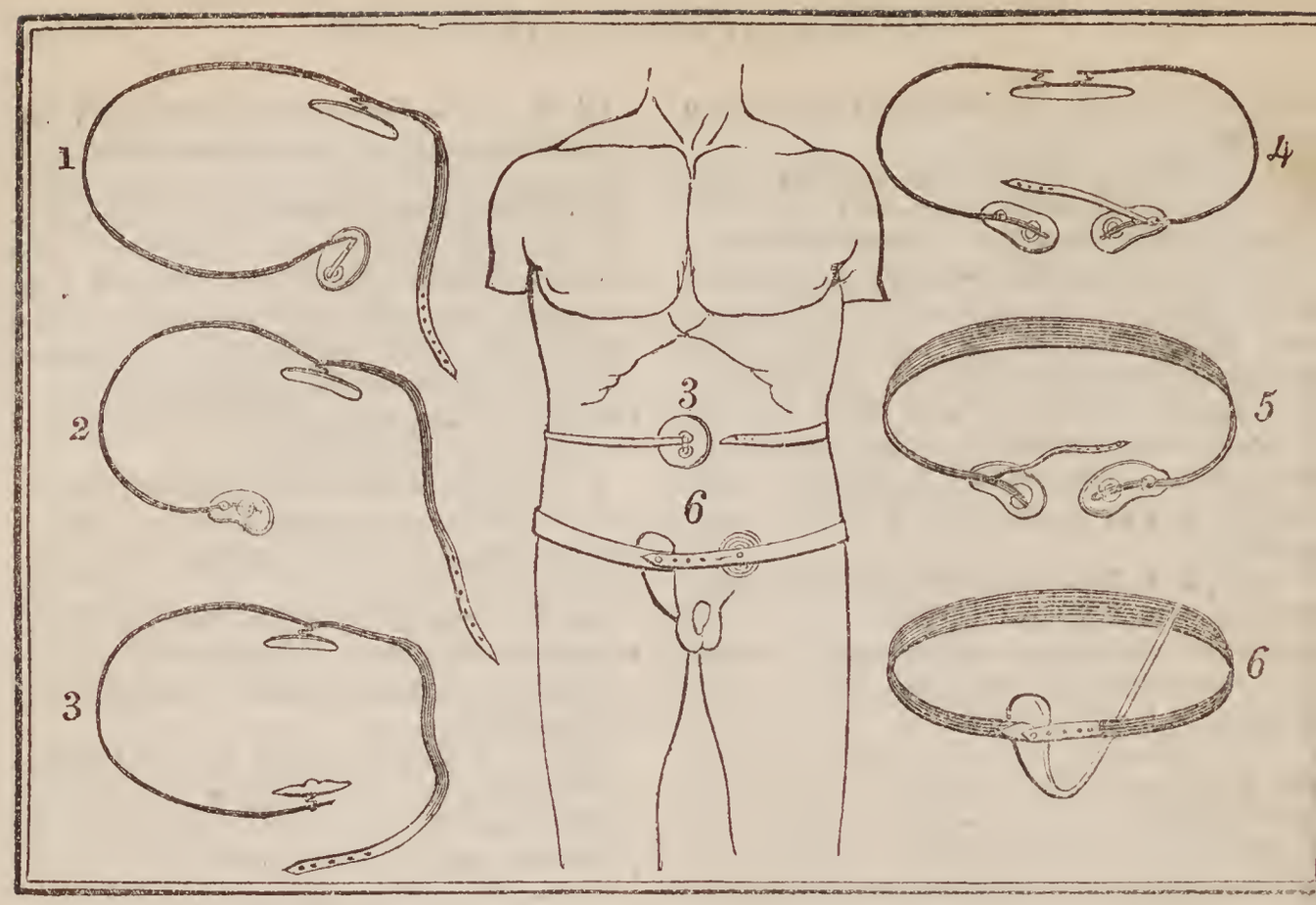
Cases examined this day (Aug. 29,) by Sir Astley Cooper.

Aneurism of the subclavian artery below the clavicle.—Aneurism of the femoral artery.—Two cases sounded for stone. One an ulcer of the bladder.—Fungoid encysted tumour on the cheek-bone of an elderly woman.—A small tumour (nævus maternus) on the back of a very young child.—A hare lip.—A chronic tumour of the breast, &c.

A case of amaurosis—patient a middle aged seafaring man. Sir Astley recommended both temporal arteries to be opened in succession, after a few days interval, and seven or eight ounces of blood abstracted, &c. Patient complains of pain over the eyes—sees objects, though very indistinctly—eyes first affected about seventeen months ago, &c.

COLE'S PATENT TRUSSES.

Conceiving that Mr. Cole's patent trusses are not so generally known or used as their peculiar merit entitles them to be, we are induced this week to lay before our readers the following wood-cut engraving of them respectively, with the explanations. Several distinguished surgeons have spoken in the most liberal terms of these trusses; and we are happy to add, that we have seen several practical proofs of their efficacy: moreover, we are of opinion, that they actually effect more to the patient, and with considerable less inconvenience, than any other truss extant.



Explanation. Fig. 1. Encompasses about two-thirds of the body, and is applied on the opposite side of the complaint; the back cushion effects a pressure beyond the center of the back, directly opposite to the pad upon the rupture, and is proper to be applied in recent cases of hernia.

Fig. 2. May be termed only a half truss which is applied on the ruptured side, the back cushion presses upon the center of the back, the spiral spring of which, when compressed, sinks into its own level, and thereby lies much closer than any other truss which has a cushion in the back. This truss, like the former, not only effects a more gentle pressure than any other description of truss, but likewise a resistance to the descent of the hernia, and may very properly be applied to a recent case.

Fig. 3. Is a half truss for umbilical hernia; the front pad as represented on the figure has two spiral springs which resists the rude pressure of the outer spring, which, with a cushion in the center of the back, will enable the patient to endure double the pressure which is generally applied without producing pain; a strap forms the other half of all the above trusses, and is looped on to the front pads.

Fig. 4. Is precisely two half trusses joined in one by means of uniting the springs to the spiral springs in the back centre, and is capable of increase or decrease in circumference.

Fig. 5. Represents a steel spring truss, having the advantage of the self-adjusting pads, which are perfectly applicable to every other description of trusses.

Fig. 6. Is a bandage having only one spiral spring by which the girdle is screwed to the pad, which is formed not merely to effect a pressure upon the ring or opening above the os pubis, but to press upon and close the aperture through which the hernia passes out of the body into the scrotum; the pad proceeds as far as the hip opposite to the complaint, it is lengthened or shortened by a buckle, and forms a loop through which the girdle passes, and is fastened to the spiral spring on the pad. This truss or bandage requires only the addition of an oval pad, over which is a piece of steel stitched into the girdle, which affects a resistance to the spiral spring in the center of the pad. See the figure. This truss is warranted to secure a rupture when every other plan has failed—relief in such a case is the only cure.

MARRIED.

On Wednesday, the 27th instant, at Croydon, Mr. Robert Davies, jun. Surgeon, of Holborn Hill, to Mary, only daughter of the late Thomas Booker, Esq. of Petersfield, Hants.

TO CORRESPONDENTS.

Select Extracts from Gall's Physiology of the Brain, &c. &c. will be resumed in our next.

Dr. M———'s *letter is received.*

PHILANTHROPOS' *letter is returned, but is expected again in the course of the week.*

London:

Printed by E. JUSTINS, 41, *Brick Lane, Spitalfields.*

Published by COX and SON, St. Thomas's Street, and 39, High Street, Southwark. Sold also by Sherwood, Neely, and Jones, Paternoster Row; Simpkin and Marshall, Stationers' Court; John Cox, Berner's Street, Oxford Street; Callow and Wilson, Gerrard Street, Soho; W. Stewart, South Bridge Street, Edinburgh; J. Cameron, opposite the College, Glasgow; Hodges and M'Arthur, Dublin; &c. &c.

THE WEEKLY

MEDICO-CHIRURGICAL & PHILOSOPHICAL MAGAZINE.

No. XXXI.] SATURDAY, SEPTEMBER 6, 1823. [*Price 4d.*

" FLORIFERIS, UT APES, IN SALTIBUS OMNIA LIBANT
OMNIA NOS, ITIDEM, DEPASCIMUR AUREA DICTA."

Some Account of the Life and Writings of the

LATE WILLIAM HEY, Esq.

Member of the Royal College of Surgeons, in London; Honorary Member of the Royal College of Surgeons in Ireland; of the Royal Medical Society, Edinburgh; and of the Literary and Philosophical Society, Manchester; and late Senior Surgeon of the General Infirmary, at Leeds. By JOHN PEARSON, Esq. F.R.S., F.L.S., M.R.I., late Senior Surgeon of the Lock Hospital and Asylum, &c. in 2 vols.

Consistent with the general design of our Magazine, we are not permitted a very extensive sphere for minute biographical detail. We must, content ourselves therefore, where, as in the present case, the incidents are important and voluminous, with a few of the leading features, or rather with an outline, than a well-finished portrait of the original.

The work now before us possesses some very considerable advantages in a literary as well as in a moral point of view—the incidents with which it is replete, are interesting and well-arranged; chastely yet forcibly pourtrayed;—the whole, in fact, from beginning to end, affords one continued excellent moral lesson blended with professional eminence, that may serve on the same bases, to frame the way to honours and distinctions in whatever calling the mind may direct the pursuit.

"The fear of God is the beginning of wisdom;" and in no instance, perhaps, is the truth of this proverb better attested and exemplified, or more truly elucidated throughout the whole of a long, useful, and an honourable career, than in the private as well as in the public life of the much lamented and respected individual who will form the subject of the following brief biographical sketch. Fulsome panegyric is not our *forte;* the just meed of praise, wherever it is due, either to the dead or the living, we are always ready to bestow: and few in the present instance will be found to differ with us in opinion.

William Hey, we are told, was the third son of Richard and Mary Hey, of the village of Pudsey, in the parish of Calverly, near Leeds, in the West Riding of Yorkshire. He was born August 23, O. S. (Sept. 3, N.S.) 1736. His father was a drysalter, or dealer in several ingredients used in the manufacture of cloth. His mother was the daughter of Jacob Simpson, Surgeon in Leeds, whose father William Simpson, M. D. exercised his profession in the town of Wakefield, near the same place.

When Mr. Hey was about three years old he was exposed to the danger of being burnt to death by his dress taking fire; but he was providentially rescued by a maid servant, who, with great presence of mind, enfolded him in her apron, and thus extinguished the flame. At the age of four years, as he was cutting a piece of string, the edge of the penknife being directed upward towards his face, in dividing the string, the point of the knife penetrated his right eye, and totally destroyed its power of vision. The left eye, as some atonement for this early mishap, possessed the faculty of seeing in great perfection which retained its power to a very late period of his life. During his childhood he was remarkable for his sprightliness and acti-

vity; and this vigour and animation of body and mind remained with him, and were conspicuous in all his pursuits, through every period of a long life.

When Mr. Hey was between seven and eight years of age, he was sent with his elder brother John* to an academy at Heath, near Wakefield, which was superintended by Mr. Joseph Randall, (a man of highly respectable character and of considerable talents in mathematics) who conducted it upon a large and liberal, though somewhat expensive plan. The late Dr. Dodgson, bishop of Elphin, and the Rev. Mr. Sedgewick, late head-master of the free school, at Leeds, were classical tutors.

It is sufficient to add that the education of Mr. Hey was by no means neglected, and that even at this early period he displayed a great fondness for learning and science—his parents were assiduous in forming his moral character. He was never known to utter a falsehood; and was punctiliously and implicitly obedient to his parents whom he never disobliged by one single act of disobedience. The paramount obligations of religion, the fear of God, the importance and great advantage of public worship, especially of private devotion, were strongly inculcated, impressed, and retained in his mind. These early habits of piety lost none of their beneficial influence with his advancing years; which were distinguished throughout by self-government, purity, and a conscientious regard to his several duties—and over his more mature and declining years the influence of religion diffused a bright and increasing influence, which actuated and adorned every subsequent period of his life, and conducted him through those various scenes of useful exertion, which procured for him a just veneration while living, and crowned his memory with honour.

At the age of 14, Mr. Hey was bound apprentice to Mr. Dawson, surgeon and apothecary at Leeds. Having been designed, from his infancy, for the medical profession, he submitted to the wishes of his parents; although had his own inclination been consulted, he would have preferred going to sea—and he, the more readily complied with the determination of his friends, in the hope, at some future time, of becoming a surgeon in a man of war.

With a mind well-regulated, and under the direction of principles firmly established by careful study and due reflection, he went to London in the autumn of 1757 to complete his professional education under the able teachers, who, at that period adorned their profession in the metropolis. The first winter was devoted to anatomical lectures and dissections; his application to this study was unremitted; and having used the aid of books to direct him in this pursuit, as long as he judged it necessary, he continued to dissect without them, and composed from his own dissections, a description of the nerves and blood vessels, which, as far as he had proceeded in the work, was found to be sufficiently accurate.

(To be continued.)

* John Hey, D.D. the second, but eldest surviving son of Richard Hey, was, during many years, fellow and tutor of Sidney College, Cambridge. He was the first Norrisian professor of Divinity in that university, rector of Passenham, in Northamptonshire, and of Calverton, Bucks. When, from increasing years, he became unable to fulfil the duties of his station, he resigned his livings, and took up his residence in London. He died in Seymour Place, near the Edgeware Road, March 17, 1815, aged 80 years, and was interred in the new burying ground belonging to the parish of St. Mary-le-bone.

PORRIGO FAVOSA.

This species of Porrigo, of which our plate is a well executed delineation, is, according to Willan and others, an eruption of pustules,

Porrigo favosa, affecting the face.

London: Published as the Act directs by E. Cox & Son, St. Thomas's St.t Boro. September 1823

termed *favi*,* on the head, face, and other parts of the body.

Appearances of the Disease.—On the scalp, the pustules are large, soft, whitish, itching, and slightly inflamed at the base. At first they are distinct, and partially distributed, as on the side of the head, or about the occiput. When broken, they discharge a thick, viscid matter, which gradually concretes into irregular brown, or yellowish, semi-transparent scabs. The ulcerations gradually extend with a constant and copious discharge, by which the scabs are kept moist, and the hairs are matted together. Under these circumstances, Pediculi, which are bred in great numbers, produce an incessant irritation, and contribute to aggravate the disease, and to excite fresh pustules. The eruption finally covers the whole scalp, the pustules, in some places, remaining distinct, in others becoming confluent, so as to form irregular, ulcerated blotches. From these, when the coverings or dressings of the head are removed, a sour, rancid vapour is exhaled, which affects, very disagreeably, both eyes, and the organs of smell and taste, in persons who examine or dress the patients.

In many cases there are among the pustules, small, red, smooth tumours which disquamate at the top, and very gradually proceed to suppuration in the same manner as scrophulous tubercles do on the arms, &c. Sometimes large abscesses form near the vertex, or at the occiput, probably originating in lymphatic glands situated there. As soon as they are broken, and begin to discharge freely, the pustular eruption, and small ulcers on the other part of the scalp, disappear.

During the Porrigo favosa affecting the scalp, the glands on the sides of the neck, and sometimes the parotid, harden and enlarge very gradually. They are, at first, like a series or chain of small, hard knots, without discolouration of the skin, but some of them afterwards inflame and suppurate.

The Porrigo favosa affecting the face sometimes commences about the lips, or upon the chin; but at other times, extends thither from the scalp, or from behind the ears. The pustules, in general, appear first at the corner of the mouth, without much tension or inflammation of the skin. They are set near together in an irregular cluster, and contain a straw coloured fluid; when broken, they become confluent, and discharge a clear, viscid matter, which afterwards concretes into a yellowish scab. Other similar ulcerations appear soon afterwards at the opposite corner of the mouth, on the lips or about the chin. These blotches being attended with an incessant itching, children cannot be prevented from rubbing or picking them; the consequence of which is, that their borders are kept sore and inflamed, and continually extending. The complaint has a more unpleasant aspect, when the ulcerations entirely surround the mouth, and are covered with large elevated irregular masses of scab like honey comb, (vide plate.) There seems to be a considerable degree of acrimony in the matter discharged from beneath the scabs; for the part or the breast, which comes frequently in contact with the diseased chin, soon turns red, and exhibits an eruption of pustules, which terminate, as on the face, by a superficial ulceration. A similar appearance is produced on the arms of the nurse, who attends a child affected with the

* The favus or cerior is larger and less elevated than the achor (which is a small accuminated pustule, containiag a straw-coloured fluid, having the appearance, and nearly the consistence of strained honey) being succeeded by a yellow, semi-transparent, and sometimes cellular scab, like a honeycomb. This definition of these putules, is conformable to the account given of them both by ancient and modern writers.

complaint. The matter transmitted from the ulcerated surface along the lymphatic veins, occasions an enlargement of the submaxallary and adjoining glands, succeeded by much pain, inflammation, and often suppuration in them.

(*To be concluded in our next.*)

DR. GALL ON THE BRAIN,

AS THE SEAT OF SENSATION AND VOLUNTARY MOTION.

Reasons which appear to prove that the Brain is the organ of all the sensations and voluntary motions.

Haller* and Sœmmering† prove, by the following arguments, that the sense of feeling is not present in the place where an object touches the nerve; that is, where the impression is received; but that sensation takes place in the brain.

1.—Pressure upon a nerve, tied by a ligature or cut, loses the faculty of exciting sensation, that is, the impression made by an object, is no longer transmitted by a nerve under these circumstances; a nerve may be irritated below the place of lesion or the ligature, without producing any sensation, and without the subject under the experiment feeling any pain. But why is the nerve insensible below the ligature, if the sensation can be produced without communicating with the brain?

2.—The same phenomenon takes place when the nerve is wounded or compressed at its origin. Pressure made at the origin of the olfactory nerve takes away the sense of smelling; the same at the origin of the optic nerve, blindness; at the auditory nerve, deafness; at the digital nerve, insensibility of the finger. This paralysis ceases immediately the pressure is removed. A wounded man whose wound penetrated as far as the corpus callosum always lost the use of his eye on the side opposite to the wound, whenever pus accumulated in it; and this blindness was removed as soon as the matter was evacuated. The sense of sight then takes place in the brain.

3.—Pressure on the encephalon, from stagnation of blood, lymph, pus, exostisis, swelling of the blood-vessels, or even from simple commotion may be accompanied with the loss of sense: then the nerves take their origin in the brain, although the nerves of those senses are in the most perfect integrity. The moment pressure on the brain is removed, the senses resume their activity.

4.—Pain is sometimes felt running up along the nerves of the brain.

5.—Pains which are transmitted in this manner from the wound of a limb may sometimes be intercepted by a ligature.

6.—People who have lost a limb, think, after they are cured, that they still feel the pain in the same part of the limb, which no longer exists, that was diseased.—This pain can only have its seat in the brain.

7.—Certain impressions are frequently preserved in the brain during life; nevertheless, when the encephalon is under pressure or any other degree of injury, they seem suddingly to disappear, and this pressure having ceased, they re-appear with the same promptitude; but as they are kept up in the brain, it becomes a matter of course that they had their origin in it.

Voluntary motion begins in the brain, or is effected by means of the nerves leaving the brain. The proof of which, is as follows:—

We have not the power of moving a certain muscle, when the functions of the brain are under any restraint, from pressure, stagnation, &c.

When the brain is irritated by a splinter of broken bone, convulsions are manifested which immediately cease on the offending substance being removed.

As the brain alone is the seat of

* Physiologie, vol. iv. section 16.

† *Sœmmering* Lehre vom Gehirn und von den nerven, p. 373, § 308.

thought, the motions produced by thought cannot come from it. If the cause of voluntary motion existed in the same parts that execute them, these motions ought to exist after the destruction of the brain, neither ought they to be augmented when this organ is irritated, or rendered impossible by its compression.

These arguments of Haller and Sæmmering have caused us to advance: *that perception and feeling only exist in the brain; that, without the brain, no external impression, or internal irritation can produce sensation; that the brain is exclusively the organ of the functions of life; that all phenomena presented to us by Zoophytes, and all those we observe in the different nervous systems of the brain, should only be considered as phenomena due to the sensitive faculty and to animal spontaneity, but ought solely to be attributed to irritability.*

In order to appreciate fully that all sensation and voluntary motions have their seat and point of departure from the brain, it has hitherto been still alledged that the nerves are only a continuation or prolongation of the encephalon, that they all originate or radiate towards the brain as towards a common centre. But this argument falls to the ground since I have proved that the nerves of the organs of sense and the allongated medullary substance are only a point of prolongation from the encephalon, that each nervous system in particular is an independent system, and that the communicating branches whereby these systems are united to each other, are sufficient to explain the reciprocal influence which they exercise the one over the other.

(The objections, and answers to these assertions in our next.)

Case of Amaurosis produced by Enlargement of Pituitary Gland. By Joseph Ward, Esq. *Member of the Royal College of Surgeons, and Apothecary to the London Hospital.*

John Austin, baker, a strong muscular man of temperate habits, aged thirty-eight, for three years past has been afflicted with dimness of vision, accompanied, at intervals, with severe pains in the anterior part of the head, and with a sense of burning and fulness in the orbits, which was at times so distressing as to cause him to apply for advice. He had leeches, blisters, and such medicines as were deemed most proper, without receiving benefit; on the contrary, the application of leeches appeared to increase rather than diminish his sufferings. Notwithstanding this, his strength and general health continued very good, being up during the greater part of the night, and frequently carrying very heavy loads during the day. The digestive organs had been for the most part, regular in their functions, excepting at slight intervals, and then only from such causes as might be considered wholly independent of any existing local affection,

Sunday, May 25, 1823, he again applied for advice; and complained that during the last five or six weeks, the dimness of vision had considerably increased; that the pains had been much more severe; that he had felt a strong inclination to sleep, so much so, that if, during the day, he sat down for a few minutes to refresh himself, he fell asleep, being unable to prevent it, and would continue so until disturbed; and that for the last two or three days he had been completely blind with the right eye, and this morning found himself, for the first time, totally blind with both: for the last week or ten days he had been able to distinguish objects, but upon going to bed the last evening, the only object he could discern was the candle, and that not distinctly. On examining the eyes, no very apparent disease manifested itself; the pupils did not contract on the application of a strong light; they appeared rather small, but perfectly clear; he complained of some loss of appetite which had existed for a few days only; pulse

96, and small natural secretions as usual. Supposing that some of the more prominent symptoms depended on disordered state of the stomach, he was ordered an emetic, and after its operation, five grains of calomel, to be succeeded on the following morning by an opening draught.

Monday, on being seen at two o'clock, it was found that the medicines had operated very well, having produced several bilious motions; headach not so considerable, and in a small degree had recovered his sight in the left eye; he could see the window; on placing the hand before his eye, could distinguish something, although unable to tell what it was. The whole of the above medicines were again ordered to be repeated.

Tuesday, he complained of being much weaker, and, in consequence, kept his bed, which he had not previously done; headach better; vision as yesterday; slept constantly, and snored very loudly. Six leeches were ordered to the temples, the calomel and opening medicine to be continued, and a blister to be applied to the nape of the neck.

Wednesday, an eminent oculist being called in, he considered the illness to arise from congestion in the cerebral vessels, and ordered twenty ounces of blood to be taken from the arm, with a saline draught every four hours; and concluding that it was a medical case, he declined his further attendance; the patient fainted when he was bled.

Thursday, he was more inclined to sleep, was roused with much difficulty, but when awake, spoke very sensibly, and answered the various questions proposed to him; since the bleeding the pulse was weaker, and 120; debility greater. This morning, a Physician being called in, he was ordered to lose twenty-four ounces of blood from the arm, the saline medicine to be continued, four grains of calomel to be taken at bed-time, and an opening draught on the following morning.

Friday, at half-past twelve, he died; and on the following day, when he was examined, the following appearances presented themselves:—The membranes of the brain were quite healthy; some degree of fulness of the vessels existed, but it was only very trifling; the fluid of the ventricles was about the natural quantity; on raising the anterior lobes of the brain, a tumour was found arising from the situation of the pituitary gland, and pressing upon the optic nerves; it was of considerable size, forming a nidus in the anterior lobes; the optic nerves were very beautifully expanded upon it; the right diverging nerve was rather more expanded than the left; the olfactory nerves were likewise very much pressed upon.—*(Med. Repos.)*

London Hospital, 7th August, 1823.

MELANGE.

On the difference of Structure between the human membrana tympani, and that of the Elephant—By Sir E. Home, VPRS.

It is found that the full sound of the french horn, produced the same effect upon the elehpant at Exeter 'Change, with the low notes of the piano-forte, as described in our report of this communication.

We have already explained the difference of structure between the human membrana Tympani, and that of the elephant, as here described by Sir Everard Home: his other observations on that membrane in other quadrupeds are as follows; they are illustrated, together with the immediate subjects of the paper, from engravings by Mr. Cliff:—

"The nearest approach I have met with among quadrupeds to this peculiarity in the elephant, is in neat cattle: in them the membrane is more oval proportionably than in the elephant; it is 10-20th of an inch long, 8-20th broad. The handle of the malleus lies in the direction of the transverse diameter of the oval and extends two-thirds of its length; it

is not, however, situated in the middle of the oval, but so much nearer to the anterior side, that the fibres on that side are two-thirds shorter than those on the opposite.

"In the deer, the membrane is of an oval form, whose transverse diameter is 7-20th of an inch, the conjugate 5-20th: the malleus has its handle nearer the middle line than in neat cattle; the anterior fibres are 8-20th of an inch; the posterior are 3-20th of an inch long.

"In the horse and hare, the handle of the malleus lies in the middle line, so that the fibres on the two sides are equal. In the hare the handle is more curved.

"In the cat, the fibres are nearly the same as in the horse. I mention this circumstance since it leads to the conclusion, that the whole feline race have a similarly constructed organ.

"The effect of the high notes of the piano-forte upon the great lion in Exeter 'Change, only called his attention, which was very great. He remained silent and motionless; but no sooner were the flat notes sounded, than he sprung up, endeavoured to break loose, lashed his tail, and appeared to be enraged and furious, so much as to alarm the female spectators. This was accompanied with the deepest yell, which ceased the music."—*(Annals of Philosophy.)*

Glassy Actynolite.

The characters and constituents of glassy actynolite from Concord Township, Delaware County, Pensylvania, as determined by Mr. H. Seybert, are as follows:—

Colour in the mass, emerald green; powder, greenish white. Lustre, vitreous. Translucent. Fracture, in one direction, fibrous; in the opposite, irregular. Very frangible. Scratches glass. Structure fibrous and fasciculated. Specific gravity, 2,987. Fusible before the blow-pipe into an opague greenish enamel. It contains:—

Silica	56,333
Magnesia	24,000
Lime	10,666
Protoxide of iron	4,300
Alumina	1,666
Water	1,033
Protoxide of Chrome—A trace	
	97.998
Loss	2,002
	100,000

The loss of weight by ignition is estimated as water in this statement. —*(Silliman's Journal.)*

Middlesex Hospital.

The governors of this institution having long seen with much concern the numerous applicants that are every week refused admission into the hospital for want of room, unanimously resolved, on the 7th of August, to open another of the wards which have hitherto been unoccupied for want of funds. Countenanced by the munificent and almost unparalleled donation of £1000, from Lord Robert Seymour for this express purpose, the governors have ventured with greater confidence to appeal to the liberality of the public, and solicit their contributions for forming a permanent fund for its maintenance: the annual expense of which will not be less than £500. Books are therefore opened for donations; and there is every hope the object will be speedily atchieved.

Gas Lighting.

The length of streets now lighted with gas in London extends over two hundred and fifteen miles; the main pipes belonging to the four gas light companies in London, reaching to this almost incredible distance, from which ramify the smaller pipes conveying the light to shops, alleys, and private dwellings, and which may be calculated at a distance greater than the mains.

1. The London gas light company have their works in Peter Street, Westminster, Brick Lane, and Curtain Road; they supply 125 miles of

main pipes, and consume annually 20,678 chaldrons of coals : this company lights 27,635 lamps. 2. The city gas light company, in Dorset Street, supply fifty miles of main : they consume 8,840 chaldron of coals annually, and light 7,836 lamps. 3. The south London Company, at Bank side, supply near forty miles of main, consume 3,640 chaldrons of coals, and light 4,038 public lamps. 4. The Imperial gas light company, in Hackney Road, is recently established.

New discovered Poison.

M. J. Kerner, a german physician, of Stuttgard, has made the discovery of a new kind of poison, that arises in smoked meats. It appears from experiments which he has made, that they become subject to some sort of decomposition that render them venemous. Liver sausages are the most susceptible of it, and the decomposition generally takes place about the middle of April. From his enquiries the doctor found, that of seventy-two persons, in the county of Wirtemburgh, that had eaten smoked sausages, thirty-seven died in a little time, and the remainder were ill for some time after.

Captain Sabine's Expedition.

Accounts have been received of the progress of the Griper, Captain Clavering, on board of which Capt. Sabine sailed from the Nore in the month of May last, for the purpose of carrying on the series of observations on the pendulum, in the high latitudes of the Polar seas. They arrived at the North Cape, after a tedious passage, the beginning of June, and proposed to remain at Hammerfest about three weeks. From that place they would go to Spitzbergen, as the second station of observations, and then proceed to the eastern coast of Greenland, intending to make their way to the most northern part of that unexplored coast, as far as the obstruction of permanent ice would permit the ship to pass. It is intended to land the instruments for observation at the highest point they should reach in Greenland, and afterwards to navigate down this hitherto almost unknown coast southwards. On quitting Greenland, they would visit Iceland, and then cross to Drontheim, in Norway, when a fourth series of observations would be completed, previous to their return in the month of November.

Remedy on the Bite of Serpents.

M. Lequevel " on the properties of the Guaco," states that this shrub, which is a sort of climber, or pliant willow, found in the warm and temperate regions of the viceroyalty of Santa Fé, towards the 45th deg. of North latitude, not only possesses the property of neutralizing the venom of the rattle snake, and other serpents whose bite proves fatal in the course of a few minutes, but may be used as a prophylactic, and with such efficacy that some doses of the juice of the pounded leaves, properly administered, will render a person invulnerable to the bites of these reptiles. This plant was transported to Martinico in 1814, and there it was studied by M. Lequevel, who has described its botanical characters. He mentions several facts attested by persons of credit, and by the local authorities, which prove that persons bitten by the most venomous serpents have, by the juice of the Guaco, been saved from any ill consequences.

Chesnut-tree Bark.

It is stated in the *Annales de l'Industrie,* (vol. vi.) that this bark contains twice as much of the tanning principle as that of oak, and nearly as much colouring matter as log-wood. With iron it forms an intensely black and durable ink. Its colouring matter has a stronger affinity than sumuch for wool, and is not affected by air or light.

Composition of Morphia.

From the experiments of M. Bussy, it appears that morphia is composed of

Carbon	69.0
Azote	4.5
Hydrogen	6.5
Oxygen	20.0
	100.0

(Jour. de Pharm.)

Crystallized Steatite.

According to analysis of Professor Dewey, this mineral contains—

Silica	50.60
Magnesia	28.83
Oxide of iron	2.59
Oxide of manganese	1.10
Alumine	0.15
Water	15.00
Loss	1.73
	100.00

"In heating the mineral, there was sometimes more and sometimes less than 15 per cent. of water liberated; but the water is taken at 15 per cent. The above proportions, it appears, are between those obtained by Klaproth in his analysis of steatite from two localities; "there can be no doubt, therefore," Professor Dewey remarks, "that these crystals are real steatite.

"The form of some of these crystals, is that of a six-sided prism terminated by six-sided pyramids, often variously truncated. Some of these appear to be four-sided prisms terminated by a four-sided pyramid. They are unquestionably the crystals intended by Jameson, as they are found in a similar situation to those mentioned by him, though they seem not to be *pseudo morpheus*. They are sometimes covered with a very fine grained and close brownish steatite. In the various specimens I have tried, it has been found very nearly two, sometimes a little more or less. Their specific gravity may be taken at 2, water being unity."—*(Silliman's Journal.)*

Earthquake and Volcanic Eruption in Java.

On the 27th of December, a shock of an earthquake was felt at Java, and it was repeated 18 times in 30 hours. At the same time, a subterraneous noise was heard in the mountain of Merapic, which began to eject stones. On the 29th, at one o'clock in the morning, an eruption took place, during which half of the mountain was surrounded with torrents of lava and columns of fire, while a heavy shower of sand and small stones covered the environs. The village was destroyed, and 15 persons perished. At the mountain of Bruno, a very strong subterraneous noise was heard, and it began to eject small black ashes which were perceptible at a considerable distance.—*(Jour. de Phys.)*

Circulation of Periodical Works.

The government of Columbia, in one of their late laws have gone beyond any other in facilitating the circulation of public papers, under the impression that it is a powerful means of promoting knowledge among the people. The following are the two principal articles of one of their late decrees:—1. Newspapers and periodical works, national as well as foreign, whatever may be their number and weight, shall pay no postage in the post offices, and in the post conveyances of the Republic.—2. National pamphlets and other printed papers shall also enjoy the same exemption in the ordinary post conveyances, provided that the entire volume of the work does not exceed four ounces in weight. If, however, the package of national printed papers exceeds the above weight, it shall pay the ordinary postage to the contractor for the conveyance.

Removal of a Brick House entire.

New York, June 4.—In certain late improvements, by widening Maidenlane, it was necessary that the house No. 85 should be pulled down or removed a distance of 21½ feet from its former front. The house is three stories high, 25 feet wide, and 45 in depth—has a slated roof,

and is a valuable building. The project of removing it was conceived and undertaken by Mr. Simeon Brown, who has before removed about 20 buildings, some of them built partly with brick, and in some instances, without disturbing the families or removing the furniture. This house, built entirely of brick, was estimated to weigh about 350 tons, and was removed, with all the chimneys, windows, doors, &c. standing. Being previously placed upon *ways*, the removal was commenced yesterday morning, and was performed by three bed-screws in the front, each of which was worked by two or three men. What was deemed the most difficult part of the undertaking was, that the house must be raised about two feet from its former foundation: this was however done by two other screws placed underneath, which raised the building gradually in the exact ratio required. In the course of the day the building was moved about 16 feet, without the least detriment or jar; the other five feet will be finished this morning. There was so little danger manifest, that during the time the house was moving, the owner entertained about 150 persons within it with a handsome collation!! The expense of removing the building is about one fifth of its value, and there is no doubt that this plan will in future, in many instances, be adopted, and a great portion of the expense of pulling down and rebuilding be saved.

The Americans at the present time bid fair to surpass their cis-Atlantic brethren in the number as well as in the novelty of their designs. Science marches rapidly, and the arts are fast improving among them. May not the removal of a house be the avant-courier of shifting a whole street, and so on in the same ratio until the United States be moved out of America altogether?—Ed.

Animal Heat.

Dulong has lately repeated the well known experiments of Lavoisier and Delaplace upon this subject, chiefly with the view of ascertaining whether the quantity of caloric, developed by the oxygen which disappears in respiration, is equivalent to the quantity given out by the body. He employed for that purpose a modification of Count Rumford's water calorimeter. The result was, that the quantity of caloric disengaged by the conversion of the oxygen into carbonic acid, is equal in carnivorous animals to between 49 and 55 parts in 100, of the heat disengaged by the whole body during the same interval of time; and in frugivorous animals, to betwixt 65 and 75 parts; and that the whole quantity of caloric disengaged by the formation of carbonic acid and water together, is equivalent to between 69 and 80 parts only. He thence concludes, that the animal heat is greater than can be accounted for by the fixing of oxygen during respiration, and therefore, that some other source of calorification must exist.—*(Jour. de Phy.)*

M. Carminati on Colchicum as an Anti-Phlogistic.

This is merely a repetition of the experiments of Mr. Haden, with the bulb of the colchium autumnale, in cases of acute inflammation, though Professor Carminati seems to claim it as his own discovery. He prescribes it under the form of oxymel colchicum. In three cases of acute peripneumony, with serous effusion and suppression of urine, he was successful in subduing the disease by this alone, which he prescribed in the dose of a scruple every three hours, in a cooling draught, increasing gradually to two, and four scruples, and even to two drachms at once, and two or three ounces per day. His success in these cases led him to try it in dropsies, both general and partial, and in organic inflammation, in subjects of different age, sex, and temperament; and he assures us that the effects were be-

yond his anticipation.—*(Memor. Instit. Milan.)*

M. Dosmond on Pepper as a substitute for Cubebs.

Substitutes, we have often remarked, are inferior to originals; but experiments of this kind often lead to discoveries of value. M. Dosmond has remarked that common pepper is more hot and aromatic than cubebs: and that like it, in gonorrhœa, &c. it has a specific action on the mucous membrane of the urethra. When it produces a purgative effect, M. Delpech found that it did not cure gonorrhœa, but it succeeded best when the inflammation of the urethra ran high. M. Delpech also remarked, that it had, like copivy, no effect on the gonorrhœa of women, and accounts for this, from the female genital organs being more excluded from the atmosphere. This we cannot understand. M. Dosmond was successful in the cases in which he administered the pepper. He gave it in doses of from seven grains to a drachm. He used it also with good effect as an external irritant in paralysis.—*(Rev. Med.)*

M. Dupetit Thouais,

Who has been for some time employed in collecting herbs and plants at Madagascar, and in India, has also devoted his attention to philological researches respecting the languages of those countries. He finds a very great analogy between the Madagascar and Malay languages, this he traces by comparing the names of a considerable number of plants that are of native growth, where these languages are spoken.

United States.

An ancient manuscript volume, of 350 pages, has lately been discovered at Detroit, in the United States. It is in good preservation, and the penmanship is beautiful. The characters in which it is written are unknown, being neither Hebrew, Greek, nor Saxon; the only parts intelligible are a few Latin quotations.

Expeditious Printing.

Mr. James Booth, of New York, has invented a new printing-press, which will throw off fifteen hundred impressions in an hour, and requires only two hands to feed it, and the engine which moves the whole machinery is only a one-horse power.

Inflammable Spring.

In the province of Ohio, near the village of Milan, on the banks of the river Huson, United States, there is a spring, the water of which is inflammable, and takes fire on the application of a lighted torch. The flame, which is very pure and very ardent, might probably be used for the purpose of giving light.

Encroachment of the Sea.

In 1804 a house was built at the mouth of the Delaware, near Cape May, at the distance of 334 feet from the sea. In 1820, from the encroachment of the sea, the distance was only 180 feet. This advancement of the waters varies from year to year, but is progressive. The same observation will apply to the coast of Brazil, though no measurement has been made, and in a proportion much more rapid than in the United States.

Fallopian Conception.

A stout woman, who had previously had two children, became pregnant for the third time, and after the usual interval was seized with labour-pains; but nothing was discharged except a bloody fluid. All the customary sequelæ of delivery succeeded. The catamenia appeared in four weeks, and returned regularly for nine months; and during this period she was constantly affected with a yellowish discharge from the vagina, diarrhœa, tenesmus, and acute pain shooting from the anterior part of the tumour to the sacrum. Fourteen months after her abortive labour, her sufferings were very much aggravated. She was affected with constant fever and frequent attacks of shivering, followed by a sense of

burning heat, especially towards the sacrum. At last several shapeless masses of bone escaped by the rectum, accompanied with bloody purulent matter; and these were found to have entered the gut by a hole half an inch in diameter, and nearly two inches above the anus. She then obtained some relief; but had occasional attacks of pain, accompanied with the discharge of bones, till eighteen months afterwards. The symptoms then gradually disappeared, and she recovered completely.—*(Dr. Julia. Journ. Univ. Fevr.* 1823.*)*

M. Magendie on Strychnine and the Resin of Nux Vomica.

The cases in which strychnine may be used, are, according to M. Magendie, general and local diseases of debility, particularly in all kinds of paralysis. The mode of employing it is in pills, containing from a twelfth to an eighth of a grain, and it is necessary, to make them keep, to cover them with gold or silver. The formula is ℞. strychnii purissimi gr. ij. conserv. rosar. ʒss. M. et divide in pilul. XXIV.—For the tincture of strychnine:—℞. alcoholis (36° cent.) ʒj. strychnii gt. iij. Dose from six to twenty-four drops.

The resinous extract of nux vomica has similar properties to the strychnine, but it has the disadvantage of varying in its medicinal strength; whereas the strychnine is uniform. M. Edwards cured with it a case of amaurosis, complicated with paralysis of the superior palpebra. M. Magendie has seen it useful in impotency, incontinence of urine, and in drowsy debility and dyspepsia. A single grain, in form of pill, given at night, is the dose for producing tetanic symptoms, though it may be increased from four to thirty-four grains, according to the quality of the medicine, and the strength of the patient. To produce the milder effects, half a grain, or a grain daily, is the proper dose. The tincture is prepared thus:—℞. Alcoholis (36°. cent.) ʒj. Extract. sicc. nuc. vomicæ, gr. iij.—*(Formulàire.)*

New Madhouse at Porto St. Celso.

A new Madhouse has been erected at Milan, near the Porto St. Celso, which contains a musical saloon, with keyed and musical instruments, for the practice of the inmates. It is intended to try here whether music will have any influence over the mental disease.

Statistics.

A table has been published from official documents, of the population, &c. of Russia for 1822. It gives the number of inhabitants for each of the fifty governments; also the governments in geographical square miles. Some of these may be noticed here.

	Inhabitants.		Sq. Miles.
Archangel....	200,000	—	11,900
Astrachan....	190,000	—	3,100
Courland	410 000	—	330
Novogorod ..	673,000	—	2,300
Moscow	1,275,000	—	476
Petersburg ..	590,000	—	840
Tobolski	430,000	—	16,800
Smolensko ..	950,000	—	1,000
Irkutsk.....	210,000	—	126,400

The sum total of inhabitants for the whole empire is stated at 40,067,000; the number of manufactories and workshops at 3,724; the total of commercial capital at 319,660,000 roubles; and the revenue from the poll tax, and that on the consumption of liquors, at 169,350,000 roubles.

The following is the official return of births, marriages, and deaths in Paris in the year 1822:—

BIRTHS.

	Male.	Fem.	Total.
Legitimate	8,671	8,458	17,129
Illegitimate known..	1,126	1,144	2,270
——— unknown	3,765	3,716	7,481
	13,562	13,318	26,880

MARRIAGES.

Young men and maids	5,933
——— widows	329
Widowers and maids	685
——— widows.....	210
	7,157

DEATHS.

Males unmarried	7,968	
—— married	2,755	
Widowers	914	
At the *Morgue*	200	
		11,840

Females unmarried	6,537
——— married	2,597
Widows	2,244
At the *Morgue*	41
	——— 11,419
Total	20259

Dead Born. Males 795, Females 626—1421

On the Medical and Surgical Sciences of the Hindus.

The successful cultivation of the healing art by European skill and learning, has left us nothing to learn from the Hindus. In the present state of their knowledge, indeed, we have every thing to teach them; but we are not to infer, from what we now behold, that they were never better instructed; there is reason to suspect the contrary, and to conclude, from the imperfect opportunities of investigation we possess, that in medicine, as in astronomy and metaphysics, the Hindus once kept pace with the most enlightened nations of the world: and that they attained as thorough a proficiency in medicine and surgery, as any people whose acquisitions are recorded, and as indeed was practicable, before anatomy was made known to us by the discoveries of modern enquirers.

It might easily be supposed, that their patient attention and natural shrewdness would render the Hindus excellent observers; whilst the extent and fertility of their native country would furnish them with many valuable drugs and medicaments. Their *Nidan*, or Diagnosis, accordingly appears to define and distinguish symptoms with great accuracy, and their *Druvyabhidhana*, or Materia Medica, is sufficiently voluminous. They have also paid great attention to regimen and diet, and have a number of works on the food and general treatment suited to the complaint, or favourable to the operation of the medicine administered. This branch they entitled *Pathapathya*. To these subjects are to be added the *Chikitsa*, or medical treatment of diseases; on which subject they have a variety of compositions, containing much absurdity, with much that is of value; and the *Rasavidya* or Pharmacy, in which they are most deficient. All these works, however, are of little avail to the present generation, as they are very rarely studied, and still more rarely understood by any of the practising empirics.

The divisions of the science thus noticed, as existing in books, exclude two important branches, without which the whole system must be defective, Anatomy and Surgery. We can easily imagine, that these were not likely to have been much cultivated in Hindustan: and that local disadvantages, and religious prejudices, might have formed very serious impediments to their acquirement. Something of the former might be accidentally picked up, by the occasional inspection of bodies, either brutal or human, which happened to be exposed; but we can scarcely expect dissections of the latter amongst the Hindus, when we find that the Greeks themselves did not venture beyond animal subjects, even in the time of Aristotle. In the absence of anatomy, of course little was to be looked for in surgery; and it has been taken for granted, that, whatever might have been the character of medical science amongst the Hindus in former days, an almost utter ignorance has always prevailed on the subjects most essential to its perfect possession and practical application. These ideas, however, are perhaps partially erroneous, and rest on our own imperfect knowledge of the medical literature of the Hindus.

The Hindu compositions on medical subjects, and even their own accounts of them, whether fables or facts, have hitherto scarcely been adverted to by Sancrit scholars. The subject is not of general interest; and requires a two-fold qualification, not likely to be often combined in

the individual who embarks in it: as it is also a matter more of curiosity than utility, there is little inducement to its prosecution. At the same time vulgar errors are always mischievous, and their correction would in some sort repay the labour that should effect so salutary a purpose. There are, no doubt, amongst the members of the medical profession in India, many competent to the task of giving to the world an accurate view of the Hindu system; and it is not intended here to anticipate any part of their labours, in the few desultory notices we propose to offer, on the existence and history of Hindu surgery.

The *Ayur Veda*, as the medical writings of highest antiquity and authority are collectively called, is considered to be a portion of the fourth or *Atharva Veda*, and is consequently the work of Brahma; by him it was communicated to Dacsha, the Prajapati; and by him the two Aswins, or sons of Surya, the Sun, were instructed in it, and they then became the medical attendants of the gods; a genealogy that cannot fail recalling to us the two sons of Esculapius, and their descent from Apollo. Now what were the duties of the Aswins, according to Hindu authorities? The Gods, enjoying eternal youth and health, stood in no need of physicians, and consequently they held no such sinecure station. The wars between the gods and demons, however, and the conflicts amongst the gods themselves, in which wounds might be suffered although death was not inflicted, required chirurgical aid; and it was this, accordingly, which the two Aswins rendered.—They performed many extraordinary cures, as might have been expected, from their superhuman character.—When Brahma's fifth head was cut off by Rudra, they replaced it; a feat worthy of their exalted rank in the profession to which they belong, and little capable of imitation by their unworthy successors.

The meaning of these legendary absurdities is clear enough, and is conformable to the tenor of all history. Man, in the semi barbarous state, if not more subject to external injuries than internal disease, was at least more likely to seek remedies for the former, which were obvious to his senses, than to imagine the means of relieving the latter, whose nature he could so little comprehend.

Surgical, therefore, preceded medicinal skill; as *Celsus* has asserted when commenting on Homer's account of Podalirius and Machaon, who were not consulted, he says, during the plague in the Grecian camp, although regularly employed to extract darts and heal wounds. The same position is maintained, as we shall hereafter see, by the Hindu writers, in plain as well as in legendary language.

According to some authorities, the Aswins instructed Indra, and Indra was the preceptor of Dhanwantari; but others make Atreya, Bharadwaja, and Charaka prior to the latter. Charaka's work which goes by his name is extant. Dhanwantari is also styled *Kasiraja*, prince of Kasi or Benares. His disciple was Surutta, the son of Viswamitra, and consequently a contemporary of Rama; his work also exists, and is our chief guide at present. It is unquestionably of some antiquity: but it is not easy to form any conjecture of its real date, except that it cannot have the prodigious age, which Hindu fable assigns it; it is sufficient to know, that it is perhaps the oldest work on the subject, excepting that of Charaka, which the Hindus possess. One commentary on the text, made by Ubhatta, a Cashmirian, is probably as old as the twelfth or thirteenth century; and his comment, it is believed, was preceded by others. The work is divided into six portions—the *Sutra St'hana*, or chirurgical definitions; the *Nidana St'hana*, or section on symptoms, or diagnosis;

Sariva St'hana, anatomy; *Chikitsa St'hana* the internal application of medicines; *Kalpa St'hana*, antidotes; *Uttara St'hana* or supplementary section on various local diseases, or affections of the eye, ear, &c. In all these divisions, however, surgery, and not general medicine, is the object of the *Sausrutta*.

The *Ayur Veda*, which originally consisted of one hundred sections, of a thousand stanzas each, was adapted to the limited faculties and life of man, by its distribution into eight subdivisions, the enumeration of which conveys to us an accurate idea of the objects of the *Ars medendi* amongst the Hindus. The divisions are thus enumerated—1. *Saila;* 2. *Salakya;* 3. *Kaya chikitsa;* 4. *Bhutavidya;* 5. *Kaumarabhritya;* 6. *Agada;* 7. *Rasayana; and* 8. *Bajikorana.* They are explained as follows:—

1. *Salya* is the art of extracting extraneous substances, whether of grass, wood, earth, metal, bone, &c. violently or accidentally introduced into the human body; with the treatment of the inflammation and suppuration thereby induced; and by analogy, the cure of all phlegmonoid tumours and abscesses. The word *Salia* means a dart or arrow, and points clearly to the origin of this branch of Hindu science. In like manner the *Hiatros*, or physician of the Greeks, was derived, according to Sextus Empiricus, from *Hios*, an arrow, or dart.

2. *Salakya* is the treatment of external organic affections or diseases of the eyes, ears, nose, &c. It is derived from *Salaka*, which means any thin and sharp instrument, and is either applicable in the same manner as *Salya*, to the active causes of the morbid state, or it is borrowed from the generic name of the slender probes and needles used in operations on the parts affected.

3. *Kaya Chikitsa* is, as the name implies, the application of the ars medendi *(Chikitsa)* to the *body* in general *(Kaya)*, and forms what we mean by the science of medicine; the two preceding divisions constitute the surgery of modern schools.

4. *Bhutavidya* is the restoration of the faculties from a disorganized state, induced by demoniacal possession. This art has vanished before the diffusion of knowledge, but it formed a very important branch of medical practice through all the schools, Greek, Arabic, or European, and descended to days very near our own, as a reference to Burton's Anatomy of Melancholy may prove to general readers.

5. *Kaumarabhritya* means the care of infancy, comprehending not only the management of children from their birth, but the treatment of irregular lactic secretion, and puerperal disorders in mothers and nurses; this holds with us also the place that its importance claims.

6. *Agada* is the administration of antidote; a subject which, as far as it rests upon scientific principles, is blended with our medicine and surgery.

7. *Rasayana* is chemistry, or more correctly alchemy, as the chief end of the chemical combinations it describes, and which are mostly metallurgic, is the discovery of the universal medicine; the elixir that was to render health permanent, and life perpetual.

8. The last branch, *Bajikarana*, professes to promote the increase of the human race; an illusory research, which, as well as the preceding, is not without its parallel in ancient and modern times.

We have, therefore, included in these branches all the real and fanciful pursuits of physicians of every time and place. Susruta, however, confines his own work to the classes *Salya* and *Salakya*, or surgery: although, by an arrangement not uncommon with our own writers, he introduces occasionally the treatment

of general diseases, and the management of women and children, when discussing those topics to which they bear relation. Pure surgery, however, is his aim; and it is the particular recommendation of Dhanwantori: *Salia* being, he declares expressly, "the first and best of the medical sciences, less liable than any other to the fallacies of conjectural and inferential practice; pure in itself, perpetual in its applicability, the worthy produce of heaven, and certain source of fame."

From these premises we may be satisfied that surgery was once extensively cultivated and highly esteemed by the Hindus. Its rational principles and scientific practice are, however, now it may be admitted, wholly unknown to them; what they formerly were, we may, perhaps, take some future opportunity of specifying.— *(Orient. Mag. for Feb. 1823.)*

Medical Society at Calcutta.

A meeting of medical gentlemen tork place on Saturday morning, (March 1), for the purpose of establishing a Medical Society, of which we understand Dr. Hare is to be president, and Dr. Adam secretary. A library is to be formed, and a monthly contribution levied from the members; but those who reside at the upper stations will be required to pay proportionally less than those who live in Calcutta. This same kind of rule have been adopted by some of the societies in London.—*(Calcutta Journal, March 4).*

Opium Trade.

The Eugenia, Captain Hogg, now leaving this port for China, has on board no less than four hundred and fifty-four chests of opium, which, at the rate of 3,000 rupees a chest, will amount in value to 1,362,000 rupees, or £136,200 sterling, and which if it sells in China for only 3,500 dol. the chest, will produce 3,178,000 rupees, £37,800 sterling, equal to a profit of 133 per cent. This is the second similar voyage made by the Eugenia. She was for a length of time opium ship in China.—*(Beng. Harkani, Feb. 25.)*

HOSPITAL REPORTS.

Guy's, August 26.—The subject of strangulated hernia, alluded to in our last number, died this evening.

Operations. Femoral Aneurism.—On Monday last a single ligature was applied on the femoral artery by Mr. Key. The tumour was situated nearly opposite the perforation of the vessel through the tendon of the triceps, and could be considerably diminished when the external iliac was compressed.

Popliteal Aneurism.—The femoral artery was tied immediately after the admission of the patient on Saturday last, (this day week) by Mr. Key, in consequence of the alarming distension of the sac. Two ligatures were applied. Gangrene has commenced in the foot and leg, which leads us to anticipate an unfavourable result.

St. Thomas's Hospital.—Sir Astley Cooper and Mr. Green will begin their Course of Anatomical and Surgical Lectures, on Wednesday, the first of October, at two o'clock.—Anatomical Demonstrations by Mr. Cooper and Mr. South.

TO CORRESPONDENTS.

M.D. and Z. Z. are received.

Several communications remain to be acknowledged, which we shall refer to in our next.

R.Y. came too late for insertion this week. So did PHILO-MED.

London:

Printed by E. JUSTINS, 41, *Brick Lane, Spitalfields.*

Published by COX and SON, St. Thomas's Street, and 39, High Street, Southwark. Sold also by Sherwood, Neely, and Jones, Paternoster Row; Simpkin and Marshall, Stationers' Court; John Cox, Berner's Street, Oxford Street; Callow and Wilson, Gerrard Street, Soho; W. Stewart, South Bridge Street, Edinburgh; J. Cameron, opposite the College, Glasgow; Hodges and M'Arthur, Dublin; &c. &c.

THE WEEKLY

MEDICO-CHIRURGICAL & PHILOSOPHICAL MAGAZINE.

No. XXXII.] SATURDAY, SEPTEMBER 13, 1823. [*Price* 4*d*.

" FLORIFERIS, UT APES, IN SALTIBUS OMNIA LIBANT
OMNIA NOS, ITIDEM, DEPASCIMUR AUREA DICTA."

Some Account of the Life and Writings of the LATE WILLIAM HEY, Esq.

(Continued from page 98.)

His assiduity during this period was exemplary, since he seldom employed less than twelve hours daily in the lecture and dissecting room, during the whole winter. By this unwearied application he acquired that share of anatomical knowledge, which qualified him for deriving superior advantages from his subsequent attendance on an hospital. Mr. Hey became a pupil of St. George's Hospital, under the late W. Bromfield, Esq.* in 1757, and began to officiate as dresser, in the month of June of this year.

During the summer he attended the medical lectures of Dr. Donald Monro,† who was elected physician

* William Bromfield, Esq. was the surgeon of Her Majesty's household, and of St. George's and the Lock Hospitals. He, and Mr. Hewitt, were elected surgeons of St. George's in 1744; he founded the Lock hospital in 1745, which was opened for the reception of patients in January, 1746. He resigned his office of surgeon of the Lock hospital, April 26, in the year 1770, in favour of Mr. Charles Bromfield, his son, who was elected his successor on the same day; and the elder Mr. Bromfield was appointed consulting surgeon of the Lock hospital. Mr. Bromfield was, during some years, a teacher of anatomy, which increasing engagements in business induced him to relinquish. He published an account of the English nightshades, of the effects of corrosive sublimate, and sarsaparilla, &c. in venereal cases, in the year 1757; thoughts on the mode of treating persons inoculated for the small-pox, in 1767; and chirurgical cases and observations, in two volumes, 8vo. 1773. There is " a case of a poor woman who had a fœtus in the abdomen for nine years," printed in the philosophical transactions. Old Abridgement, vol. ix. page 111.

Mr. Bromfield was a very respectable practical surgeon, and an intrepid operator, whom no unexpected accident could disturb. His mind was not scientific, nor had it received much cultivation; and he wanted the modesty and simplicity, which are often attendants on great mental powers and attainments. His manner was rough and blustering; he affected to be a wit, but was often coarse, and not unfrequently obscure; yet he was possessed of real kindness and humanity, and had he been less careless in giving offence by the freedom and harshness of his censures, he would have been esteemed a pleasant and entertaining companion. His surgical writings have not met with so favourable a reception as perhaps they deserve. They contain many valuable practical remarks, and merit at least one perusal. But, as the theories which encumber his book are crude and obsolete; his descriptions sometimes perplexed and obscure; and his manner of writing neither perspicuous nor agreeable, the neglect into which his productions have fallen can excite no reasonable surprise.

† Dr. Donald Monro was in good estimation as a teacher of medicine, and was regarded as an able practical physician. His writings indicate him to have been a man of considerable industry, much observation, and sound judgment. His success in acquiring professional employment was neither equal to his merits, nor to his reasonable expectations. To whatever other sources his failure in this respect may be attributed, perhaps one of the principal causes was the similarity of his name to that of Dr. Monro, the very respectable physician of Bethelem hospital, who was in great reputation for the treatment of insane persons. The very minute, and apparently accidental circumstances, upon which the elevation or depression of a medical man frequently depends, form a very curious part of the history of human events. Perhaps, Dr. Donald Monro, may not have been the only professional man, to whom identity of name has been

of St. George's Hospital, after the death of Doctor Clephane. Early in the year 1759, Mr. Hey attended the lectures of Dr. Mackenzie in midwifery. His assiduity in the studies of his profession in general, and of this important branch in particular, suffered no abatement; and he omitted no favourable opportunity of verifying by practice the instructions he received from his teacher. Being aware of the disadvantage of engaging himself with a multiplicity of objects at the same time, it was his method to direct his *principal* attention to one subject at a time, without, however, absolutely neglecting others, when his leisure would permit. He felt the importance of being thoroughly acquainted with the principles and practice of those professional gentlemen, under whose direction his studies were pursued; and in order to accomplish this purpose the more certainly, he was accustomed to take a list of such doubts and queries as had occurred to him since the preceding lecture, and to propose them to the teacher, either before or after the lecture, as he found most convenient.

Towards the end of the year 1758, a gentleman resident in London, who had before observed the great prudence and correctness of Mr. Hey's general conduct, and was acquainted with the integrity of his character, expressed a desire of uniting him in marriage with his daughter. The proposal does not appear to have been disagreeable to Mr. Hey; but, with great propriety he declined making any advances towards accomplishing this object, until he had consulted the wishes of his parents. His father's reply abounds with very judicious remarks on this subject. He offered many prudential reasons, to his son, against entering into such an engagement, under his particular circumstances, although he testified no disinclination to his marrying at a more suitable period. As Mr. Hey frankly consulted his parents in this important matter, so he exhibited his filial piety by an unreserved acquiescence in their determination.

Mr. Hey, having completed his education in London, in the spring of 1759, his father, who was desirous that all his sons should be qualified to fulfil the highest duties of their respective professions, made his son William the offer of prosecuting his studies in Paris. But, he, having made what enquiries he could, respecting the probable advances of such a measure, and considering the many disadvantages to a man of his character, that would necessarily be connected with a residence in the French capital, declined his father's proposal, and returned to Leeds in the month of April, 1759, there to commence the exercise of his profession.

(To be continued.)

a vexatious source of injury and mortification.

His publications are numerous and many of them valuable. A list of them is given in the Bibliotheca Britannia of Watt.

DR. GALL ON THE BRAIN,

AS THE SEAT OF SENSATION AND VOLUNTARY MOTION.

(Continued from page 101.)

Objections, and answers to them against the doctrine of this article.

Dumas maintains, as I have already said, that the brain should just as little be considered the organ of sensation, as it should be the seat of the soul, since of itself it is insensible. It is true that in mutilating the brain, we do not excite by far so acute a pain as when the nerves are pulled or pinched, or, in fact, when any other kind of violence is exercised upon them. But there is a state of disease where the brain becomes very painful, and it has this in common with several other parts which only acquire sensation from a diseased condition. Besides, we must not lose

sight of the fact that each part, each viscus and each sense is capable of making us feel a particular sensation. It is one thing to feel what it is to be hungry, through the medium of the stomach, and another to feel hope and pity. Without any contradiction, we feel that we will, and we feel that we think. But no one denies that will and thought have their seat in the brain; neither then can it be denied that the brain makes us experience sensations in a manner peculiar to itself.

Dumas and M. Richerand reject also the above argument,* taken from the circumstance that pain is felt in amputated limbs. According to them, these pains are only the recollections of pains formerly felt in those parts. But I have already elsewhere proposed the question: *how does it happen that with all the force of the will these pains cannot be renewed? How does it happen that from some change in the weather one is, on the contrary, attacked with them as it were unexpectedly?*

Neither do monsters born without brain, who nevertheless live for some time after birth, and make different motions, prove any thing against the assertion that the brain is the organ of every sensation and of all voluntary motions. By instancing these, the phenomena of purely automatic life are manifestly confounded with those of animal life.

The same may be said of Gautier's argument,† who maintains that a cock whose head has been cut off, springs up and beats his wings to take vengeance upon his enemy; as well as that of Callois, who pretends that the shaking of the legs of the guinea pig and the rabbit, after their heads are cut off, are motions made by these animals for the purpose of scratching themselves. Insects and amphibious animals still lay eggs although deprived of their heads; similar phenomena are observed, in the muscles and viscera of more perfect animals, when operating on their bodies immediately after death, and that irritability may be re-animated by artificial means, after the natural motions have, in fact, subsided. The peristaltic motion of the intestines is continued for a length of time after death, and it not unfrequently happens that the womb, by means of automatic contractions, expels the fœtus.

All these motions appear to be accompanied by sentiment and volition in proportion only to the mechanism which executes them; they take place nearly in the same manner as when they are accompanied by feeling and commanded by the will. They only prove one thing, which is, that automatic motion and spontaneity do not require the existence of the brain. This again is another reason why neither the intensity, nor the duration of life are in proportion to the cerebral mass.

Although Haller and Sœmmering have endeavoured, by the above arguments, to establish that the brain is exclusively the organ of sensation, conscience, and voluntary motion, they conceive it probable that children born, properly speaking, without brain, and in whom the nerves only of the senses and the parts of the face were developed, have cried and taken the breast. But as Haller and M. Sœmmering say, the olfactory nerves have their origin in the corpora striata, and the optic nerves in the optic membranes, these physiologists must suppose that a sufficiently considerable cerebral mass existed in the children they allude to; and under this point of view, their observations prove nothing against the necessity of the presence of the brain. I do not generally place much confidence upon any ob servation, when I am in doubt, whether the author of it or not formed his judgment upon a full and entire k nowledge

* Nouveaux élémens de Physiologie de *Richerand*, 7 edit. t. 11, p. 181 et 182.

† Haller, Physiol. t. iv. p. 353.

the joint,—that of the olecranon,—and that of the coronoid process of of the cause. I had an opportunity of examining the head of an acephalus still-born. The parietal bones were so flattened against the basillary process, and the protuberances of the temporal bones, that it was impossible to discoverthe least trace of brain. I nevertheless found the olfactory, optic, and auditory nerves which were very lengthened and distinct. These nerves communicated with an apparently carnous sac, about $2\frac{1}{2}$ inch in length, hanging to the nape of the neck. On cutting into the skin of this sac, I found most distinct circumvolutions; consequently, I beheld the brain* before my eyes.

(*To be continued.*)

OBSERVATIONS *on* FRACTURES *of the* NECK OF THE THIGH BONE, *being an Appendix to the Work on Dislocations and Fractures of the Joints. By* SIR A. COOPER, BART, F.R.S. SURGEON TO THE KING, *&c. &c &c. Longman, Hurst, Rees, Orme and Brown, Paternoster Row--Highly, Fleet Street—E.* COX *&* SON, *St. Thomas' Street, Borough, p.p.* 44, *with numerous plates.*

In common with our contemporary journalists, we withheld our observations on Mr. Earle's "Practical Observations on Surgery," in consequence of the author of the work on "DISLOCATIONS and FRACTURES" having promised, at an early period, after the publication of the former, to give a public refutation to almost every statement contained in it.

Anxious to redeem this pledge, Sir Astley has stolen a march upon us by bringing forward his "OBSERVATIONS" much sooner than they were expected: it having, as we were given to understand, been intended to append them to the third edition of the work on "Dislocations and Fractures;" thus, doing that now for himself, which few, if any, could have done half so well for him.

"I had made a resolution," says the author, "in early life never to notice any controversial production, but to suffer my statements to fall into oblivion if they were wrong, or be confirmed, if correct, by experience and by time, which are the only tests of truth. But when I observe the rising generation likely to be misled by INCORRECT SURGICAL PRINCIPLES; when I see my opinions (unintentionally, no doubt) misrepresented; and, more especially, when I perceive the practice of the hospital to which I belong censured, I should be wanting in the most common, as well as in the best feelings of nature, if I did not repel such attacks."

After these undaunted and magnanimous declarations, teeming with candour, and christian charity that puts the best constructions upon the most perverse designs;—a neat, correct, and well-merited eulogium is paid to the present constitution of Guy's Hospital — for the honor of which, and not from a spirit of personal justification, it must be well known to the world, the *veteran* risks his well-earned laurels, steps boldly into the arena, takes up the gauntlet, wields the spear, and discomfits the fool-hardy stripling: or, in the language of Ajax to the Greeks,

'If I did not oblige the foe to yield,
Yet neither did I basely quit the field.'

"In making some observations on the remarks on my work, in a recent publication, it is not my intention, either in spirit or in word, to descend from the character of a gentleman; but I shall examine the essential points in which the opinions differ from mine; and omit the mention of names, because *I contend for doctrines and not with individuals.*

"But before I proceed to the analysis of this production, which the imputation cast upon Guy's Hospital first roused me to notice, let me state the opinion which is attempted to be controverted. First—I hold it to be a GENERAL PRINCIPLE that fractures of the neck of the thigh bone, —fractures of the patella,—those of the condyles of the os humeri within

* It weighed upwards of an ounce.

the ulna, unite by ligament and not by bone. Secondly—that in the case in which ossific union is supposed to have been produced in the neck of the thigh bone, the appearances are similar to those morbid changes in the structure of the bone, by which the head of the os femoris sinks upon its thigh.

"With respect to the first of these positions, it has been observed by the able and intelligent editor of the Medico-Chirurgical Journal "that it has been *falsely* asserted that I deny the possibility of the union of a fractured neck of the thigh bone:" and, to shew that I only contend for a *general principle*, and am ready to allow an exception might occur, I make the following quotations from my work on dislocations and fractures of the joints, second edition, page 127. 'In all the examinations which I have made of transverse fractures of the cervix femoris, entirely within the capsular ligament, I have never met with one in which an ossific union had taken place, or which did not admit of motion of one bone upon the other; *to deny its impossibility, and to maintain that no exception to a general rule can take place*, would be presumptuous, especially when we consider the varieties of direction in which a fracture may occur, and the degree of violence by which it may be produced; as, for example, the fracture is through the head of the bone, and there is no separation of its fractured end; or when the bone is broken without its periosteum* or reflected ligament being torn; or when it is broken obliquely, partly within and partly external to the capsular ligament; but all I wish to be understood to say is, that if it ever does happen, it is a very rare occurrence, and I have not yet met with a single example of it.

Again, with respect to its treatment, I observe, page 142. '*I am never so wedded to any opinion as to be prevented from trying, or wishing others to employ means which appear plausible and ingenious; and, therefore, this instrument ought to have a fair trial given to it.*†

"To prevent too hasty a decision on the nature of the case, and to lead men to act with caution, I have said, page 144, *In every case, however, in which there is the smallest doubt whether it is a fracture within, or one external to the ligament, it would be proper to treat the case as if it were the fracture I shall hereafter describe, and which admits of no ossific union.*

Again, at page 143, '*the cases in* UNION MIGHT BE PRODUCED ARE TWO:—*one in which the peritoneum covering the neck of the thigh bone is not torn through, which now and then happens; the other is when the head of the bone is broken, so that the cervix still remains in the acetabulum;*‡ *but in neither of these cases will the limb exhibit the shortened state which the fracture of the neck of the bone usually produces.*' These quotations, observes the author, are considered sufficient to confirm Dr. Johnson's statement.

As a further proof that the general principle stated by the author is correct, forty-three cases are produced in the appendix to the second edition of the work on dislocations and fractures, from different collections, of non-union by bone, of fractures of the neck of the thigh bone: (See No. 10 of the MEDICO-CHIRURGICAL AND PHILOSOPHICAL MAGAZINE.) to which another is since added, from an experiment upon a living animal; while upon the opposite side of the question, ONLY A

* I beg to be understood, that I do not say that such fractures will unite, but that some extraordinary variety in the fractures might produce a rare exception.

† An instrument for extending the thigh to produce union of the cervix femoris, invented by Mr. Hagerdorn.

‡ Mr. Brodie informed me of a case of that kind.

SINGLE INSTANCE, "upon which the mind can for a moment dwell," has yet been produced; and in this case, the same appearances were found in both the thigh bones, "and even these resembled what I have several times observed in the dead body, arising from a softened state of the bones."

"But," says the author, "in speaking of fractures of the neck of the thigh-bone within the capsule of the joint, I have been necessarily led to describe those which are external to it, as well as that to which the trochanter major is subject; and as the descriptions I have given have been objected to, it is proper I should examine these objections in detail."

"But first let me observe, that I did expect an experience of near forty years would have been attempted to be contradicted by numerous dissections of these cases, and by experiments upon living animals, as these are the only modes by which the point can be determined."

"Is it a fact, or is it not, that fractures of the neck of the thigh-bone generally unite by ligament? No argument can ever settle the question; it is to be decided only by observation.

"Is it a fact, or is it not, that fractures of the neck of the bone external to the capsule and into the cancelli of the trochanter, and the other species of fracture at this part, viz. that through the trochanter major, unite by bone? Dissection or experiment can only prove or disprove it."

I shall now proceed (says Sir A.) to an analysis of the work in question;* and first examine the correctness of its anatomy.

Speaking of the head of the thigh-bone, the author says, page 2, "It (the head of "the bone) is covered in the recent state "with cartilage, excepting at its centre, "where there is a depression for the inter-"articular or round ligament."

'Now, I state, that this depression is not at the centre of the head of the bone, in which I am sure every anatomist will agree with me; and the best physiological reasons may be given why it is not seated where the author says it is to be found.'

Speaking of the round ligament he says, page 7, "This ligament is so disposed "that luxation of the femur on the obtu-"rator foramen is the only one which can "happen without rupturing it."

'If it be meant that when the muscles or capsular ligament are removed, the head of the bone can be drawn over the edge of the acetabulum towards the obturator foramen, every Tyro in anatomy knows it; but if it be intended to state from this structure, that the dislocation in the obturator foramen, happens without rupture to this ligament, dissection proves that such an opinion is erroneous.'

He says, page 158, "What ligamentary "band Sir Astley alludes to I am rather "at a loss to understand. I have not been "able to detect any distinct ligament on "dissecting the joint, nor do I find any "such mentioned by Sœmmering or any "other author."

If the author, observes Sir Astley, will have the kindness to call upon me, I will shew him as follows:—'a band of ligamentous fibres crossing from the side of the coronoid process to the olecranon; and upon the radial side of the ulna, the upper portion of the coronary ligament of the radius passing from the side of the olecranon towards the neck of the radius. If the olecranon be broken off, and these ligamentous fibres left entire, the olecranon will remain still united to the ulna by means of these ligamentous productions, which I should not have noticed but for their influence on fractures of this bone.

(*To be continued.*)

* Practical Observations in Surgery.

CLASSIFICATION OF POISONS.

From Paris' and Fonblanque's Medical Jurisprudence.

(Continued from page 87.)

Poisonous substances have been very differently arranged by different authors, each appearing to have adopted a classification best suited to promote the particular views and objects of his own pursuit; thus, the botanist and chemist, engaged in the examination of the physical characters by which poisons may be individually distinguished and identified, have very judiciously erected

their system upon the basis of natural history. The pathologist, whose leading object is the investigation of the morbid effects which follow the administration of these agents, with equal propriety and justice, prefers a classification deduced from a generalization of the symptoms they are found to occasion: while the physiologist, who seeks to ascertain through what organs, and by what mechanism, they destroy life, may be reasonably expected to arrange the different poisons under divisions corresponding with the results of so interesting an inquiry.

To meet the comprehensive views of the forensic toxicologist, an arrangement would seem to be required, that should at once embrace the several objects which we have just enumerated; for the data from which the proof of poisoning is to be inferred, are, as we have often stated, highly complicated in their relations. No such classification, however, can be accomplished, and we are therefore compelled to select one which may approach the nearest to our imaginary fabric. That which was proposed by Fodéré, and adopted, with some trivial alteration in the order of succession of the classes, by Orfila, in his celebrated system of toxicology, although it has many defects and some errors, nevertheless merits the preference of the forensic physician; its basis is strictly pathological, and yet it distributes the different poisons, with some few and unimportant exceptions, in an order corresponding with that of their natural history.

The first two classes, for instance, present us with substances of a mineral origin: the third and fourth, with those which are principally of a vegetable nature; and the sixth, with objects chiefly belonging to the animal kingdom. The importance of acknowledging a division, which has a reference to the three great kingdoms of Nature, is perhaps greater than the reader may anticipate; for in enumerating the various experiments to be instituted for the detection of poisons, we are, by such an arrangement, enabled to bring together a connected series of processes, nearly allied to, intimately connected with, and in some respects, mutually dependant upon each other.

The following is the arrangement of Fodéré as modified by Orfila;* viz. Cl. I. Corrosive, or Escharotic poisons. Cl. II. Astringent poisons. Cl. III. Acrid or Rubefacient poisons. Cl. IV. Narcotic or Stupefying poisons. Cl. V. Narcotico-Acrid poisons. And Cl. VI. Septic or Putrefying poisons.

Class I. *Corrosive or Escharotic Poisons.*—Such as corrode and burn the textures to which they are applied. When internally administered, they give origin to the following symptoms: violent pain, accompanied with a sense of heat and burning in the stomach, and throughout the whole extent of the alimentary canal; frequent vomitings, often sanguineous, and alternating with bloody diarrhœa, with or without tenesmus; the pulse hard, small, frequent, and at length imperceptible; an icy coldness of the body; cold sweats; a great anxiety and oppression at the præcordia; and hiccup. Sometimes the heat of the skin is intense, the thirst inextinguishable, and the unhappy patient is tormented with Dysuria and Ischuria, violent cramps in the extremities, and horrid convulsions, which are relieved only by death. Such are the general symptoms by which this species of poisoning is characterized; the rapidity with which the symptoms terminate their course will depend upon the violence of the dose, and the particular species of poison which has produced them: there are, moreover,

* *Vide Orfila* on *Poisons*, in 2 vols. (a valuable and indispensable work to every class of the faculty) translated for and published by Cox and Son, Borough.

other symptoms which will be more conveniently described, when we come to speak of the effects of corrosive poisons individually. In this class are ranked the following substances:—Metals. I. *Arsenic.* 1. Arsenious Acid, or White Oxide of Arsenic. 2. Arsenites, or Combinations of that Acid with salifiable Bases. 3. Arsenic Acid. 4. Arseniates, or Combinations of the preceding Acid with the Bases. 5. Sulphurets of Arsenic, or Orpiment and Realgar.—II. *Mercury.* 1. Corrosive Sublimate of Mercury, or Oxymuriate of Mercury. 2. Red Oxide of Mercury. 3. Red Precipitate, or Nitric Oxide of Mercury. 4. Other preparations of Mercury.—III. *Antimony.* 1. Tartarized Antimony, or Tartar Emetic. 2. Oxide of Antimony. 3. Antimonial Wine. 4. Muriate of Antimony, or Butter of Antimony.—IV. *Copper.* 1. Blue Vitriol, or Sulphate of Copper. 2. Verdegris. 3. Oxide of Copper. 4. Other preparations of Copper.—V. *Tin.* 1. Muriate of Tin.—VI. *Zinc.* 1. Sulphate of Zinc, or White Vitriol. 2. Oxide of Zinc.—VII. *Silver.* 1. Nitrate of Silver, or Lunar Caustic.—*The Concentrated Acids.* 1. Sulphuric. 2. Muriate. 3. Nitric. 4. Phosphoric, &c.—*Hot Liquids.* 1. Boiling Water. 2. Melted Lead.—*The Caustic Alkalies.* 1. Potass. 2. Soda. 3. Ammonia.—*The Caustic Alkaline Earths.* 1. Lime. 2. Baryta. 3. Muriate and Carbonate of Baryta. *Cantharides. Phosphorus.*

Class II. *Astringent Poisons.*—They occasion a remarkable and unrelenting constriction of the great intestines, especially the colon, so as to resist the operation of the most powerful cathartic remedies. Violent cholics ensue, and partial paralysis; in the end if the dose be sufficiently large, or if small doses have been frequently repeated, they will excite inflammation of the alimentary canal, but it is not succeeded by that disorganization which generally characterises the operation of poisons belonging to the preceding division. We rank under the present class only the preparations of lead, viz. 1. Acetate of Lead, or Sugar of Lead; 2. Oxides of Lead, Red Lead, Litharge; 3. Various saturnine impregnations.

Class III. *Acrid or Rubefacient Poisons.*—These poisons are known by their producing an acrid taste, more or less pungent and bitter; a burning heat, and considerable dryness in the mouth and fauces; and a constriction, more or less painful, in the throat. Acute pains are, after a short interval, experienced in the stomach and bowels, which are quickly followed by copious vomiting and purging, and which continue, with the most painful efforts, long after the alimentary canal has been completely evacuated. A few hours after, phenomena are observed, which indicate a lesion of the nervous system, such as vertigo, dilated pupils, dejection, insensibility, laborious respiration, and death. The lesions of texture, occasioned by the action of acrid poisons, have the greatest analogy to those produced by corrosive poisons; in fact, says M. Orfila, we do not hesitate to declare, that there exists a perfect identity between the alterations of the digestive canal produced by the poisons of these two classes, when introduced into the stomach." The substances included under this class belong, for the most part, to the vegetable kingdom, such as scammony, camboge, black and white hellebore, bryony, euphorbium, seeds of the ricinus, iatropa curcas (Indian nut), croton tiglium, squill, aconite, &c. &c.

Class IV. *Narcotic or Stupefying Poisons.*—Such as occasion stupor, drowsiness, paralysis, or apoplexy, and convulsions. They do not produce any change in the structure of parts to which they are applied. M. Orfila has satisfactorily ascertained

that no alteration can be discovered on dissection in the digestive canal of persons who have swallowed any one of the poisonous substances of this class.

Class V. *Narcotico-Acrid Poisons.*—This division, as its name implies, is intended to receive such substances as produce the united effects of those belonging to the two preceding classes, acting for instance at the same time, as narcotics and rubefacients. Amongst the articles of this class, the following may be enumerated, Belladona, stramonium, tobacco, foxglove, hemlock, nux vomica, camphor, cocculus indicus, certain mushrooms, alcohol, &c. &c.

Class VI. *Septic and Putrefying Poisons.*—By this term are included those poisons which, according to Orfila, "occasion a general debility, dissolution of the humours, and syncope, but which do not, in general, alter the intellectual faculties." The articles of this class being almost entirely to the animal kingdom, with the exception perhaps of a few gaseous compounds, and the spurred rye, or ergot, viz. *venomous animals: animals whose fluids have been depraved by antecedent disease; the poison of fishes; substances in a state of putridity; spurred rye, or ergot.*

Such is the classification which, for reasons already stated, it is our intention to adopt on the present occasion. We shall, however, in an additional chapter, under the title of "Aërial Poisons," treat of those substances which are exclusively capable of acting upon the body through the medium of the atmosphere, or which require to be in a state of vapour, or gas, to ensure their operation.

With regard to the classification of Fodéré and Orfila, we must here observe, that we follow it only conventionally, and that while we acknowledge it has being very convenient for the consideration of poisons, in reference to their forensic relations, yet we must not be considered as insensible to its many defects and fallacies. In the first place, it has little or no reference to the enlarged views of the modern physiologist, respecting the "*modus operandi*" of poisons; nor indeed is its construction susceptible of such modifications and improvements, as can ever render its degree of perfection progressive with the advancement of science. In the next place, the classes are in many particulars ill-defined, and indistinctly, if not erroneously, divided. How questionable, for instance, are the boundaries which separate corrosive from acrid poisons? even the respective species of each class are, in many instances, less allied to each other than the great divisions to which they are subordinate. As an exemplification of this fact we have only to compare the physiological actions of arsenic and corrosive sublimate; the former of these substances occasions death by being absorbed, and thus acting as a vital agent, the latter, by its local action as a caustic on the textures with which it comes in contact. In the same manner, if we examine the individual actions of the different species composing the class of "Acrid" poisons, we shall find the same want of uniformity; thus the spurge-flax, and the jatropa curcas, act by occasioning a local inflammation, while the hellebore, being rapidly absorbed, exerts a fatal action on the nervous system, and produces only a very slight inflammation. The class of narcotic poisons is more absolute in its definition, and more uniform in its physiological affinities, and therefore less objectionable, than the divisions to which we have just alluded; but the propriety of the term "Narcotico-Acrid" may be very reasonably questioned; even Orfila expresses his doubts upon the subject, "because the narcotic or sedative effects only follow the previous excitement."

Some of the poisons, under this last mentioned class, are rapidly absorbed, and act, through the medium of the circulation, on the nervous system, without producing any local inflammation; whilst others, again, merely act upon the extremities of the nerves, with which they come in contact, and without being absorbed, occasion death by a species of sympathetic action.

These few objections, and many more might be adduced, are sufficient to demonstrate the imperfection of the classification under consideration, and which would render it wholly unavailable to the pathologist who must adopt his treatment according to the physiological action of each poison. The author has accordingly, in his "Pharmacologia," ventured to propose an arrangement, in conformity with such views; and the following sketch of it may perhaps form a useful introduction to the general observations which it will be hereafter necessary to offer upon the "*modus operandi*" of poisons.

(*To be continued.*)

In Number 14, we alluded to the following case of Axillary Aneurism, among our Notices to Correspondents, requesting further particulars before we could venture to give it place among our miscellanies; but as we were not favoured with them from our anonymous friend, we are now enabled to lay it at full length before our readers from the Medical Repository for this month. It will not be found, we trust, without interest.

CASE OF AXILLARY ANEURISM,

In which the Subclavian Artery was tied above the Clavicle, and the Patient recovered. By THOMAS BULLEN, Esq. Surgeon to the Lynn Dispensary, &c. &c.

Thomas Mitchell, sailor, sixty years of age, was admitted a patient of the dispensary March 31st, 1823, having a soft pulsating tumour, of an oval and conical form, situated on the right side, and extending obliquely from the sternal end of the third rib, to a little above, and within one-fourth of the humoral end of the clavicle. It could be partly emptied of its contents by pressure, but would gradually return to its former size on the pressure being removed; and at the same time, on applying the ear, a purring noise, at each systole of the heart, was very distinctly heard. The right arm and hand were frequently benumbed, and, at times, very painful and slightly swollen. The pulsation of the brachial and radial arteries was so feeble as scarcely to be felt.

About four months ago, a tar barrel fell upon the shoulder, but occasioned him, at the time, only temporary inconvenience. At a consultation, it was agreed that an operation afforded him the best chance of recovery. To this he readily consented; and it was performed on the 3d of April in the following manner:—

The patient being placed on a chair in a proper light, with his head held backward and to the left side, and the right arm brought forward, the integuments were drawn tightly downwards, and divided from near the sternum, upon and along the clavicle to the extent of four inches: a second incision was then made from the centre of the first, in the direction of the outer edge of the sterno-cleido mastoideus, by thrusting a sharp-pointed bistoury underneath the skin, which was pinched up between the finger and thumb. On turning back the outer flap, the external jugular vein was exposed. A needle, armed with a double ligature, was passed beneath the vein, the two ends were tied about an inch apart, and the vessel was divided between them.—Proceeding in the dissection to the level of the axillary plexus, a momentary interruption was occasioned by the posterior cervical artery, which was greatly enlarged, running transversely from the sternal end of the wound. Being desirous of not dividing so large an anastomosing artery, after a little cautious dissecting, a blunt hook was passed underneath it, and it was

turned out of the way. Some small arteries were divided and immediately secured. Much inconvenience was experienced, after exposing the axillary plexus, by an oozing of blood from a division of the cephalic vein at the humoral end of the wound; it was, however, stopped by a pledget of lint.—At this stage of the operation, the spatulas of sheet copper, recommended by Dr. Colles, of Dublin, and Mr. Liston, were made trial of, but were found of little assistance. A pulsation being distinctly felt at the bottom of the wound, by cautious procedure, partly with the handle of a knife and the finger nail, an artery, supposed to be the subclavian, was exposed and detached; a needle, made after the description given by Mr. Liston, and armed with a ligature, was passed underneath it without any difficulty. In doing this it was observed that the coats appeared thin, somewhat resembling a vein.* On turning this aside by means of the ligature, which was kept loose round it, the subclavian artery was seen and felt pulsating, a little cellular membrane merely intervening; and it was then conjectured that a nerve had been included in the ligature. The same method, in order to secure the artery, as above noticed, was proceeded in; but here some difficulty was experienced until it was more fully exposed by a partial division of the anterior scalenus muscle; it was then accomplished by passing the needle from within outward, and depressing the handle, when the point projected on the opposite side of the artery, covered with some intervening substance, which was broken through with my nail. The ligature was then laid hold of with a pair of forceps; and, on withdrawing the needle, a large stream of florid blood gushed forth, *per saltum*, from the wound. My friend, Dr. Whiting, who stood near, plunged his finger into the wound and pressed upon the artery, and while he thus suppressed the bleeding, the ligature, which was supposed to be upon the subclavian, was tied. The finger being cautiously withdrawn, it was a source of the highest gratification to discover that no hæmorrhage followed. All present were relieved from a degree of anxiety painful beyond description. The pulsation, however, of the artery, as it passes between the clavicle and the first rib, was not stopped, nor was it in the aneurismal tumour. On attempting to move the first ligature, it was found fast; and, by sponging away the blood from the bottom of the wound, it became evident that this had been, in the hurry and agitation of the appalling moment, tied in place of that on the subclavian, and that the knot had included one of the ends of the latter ligature. As it was difficult to distinguish the included end from those belonging to the ligature that had been tied, by the advice of the gentlemen present, all the three ends were made fast, in succession, to the one which remained detached on the other side of the artery. The pulsation then ceased, and never afterwards returned.

It was now evident that, in pressing up the end of the needle† to clear the point of it, the coats of an anastomosing vessel, lying anterior to the subclavian, had been penetrated, and under which the first ligature was passed.

I had provided myself with an instrument to enable me to tighten the knot of the ligature which lay at so great a depth; but this was rea-

* Here we ascertained, by pressure on the vessel, that it did not command the pulsation of the tumour, and thence concluded that it was not the subclavian. It was then turned aside, and the proper trunk discovered.

† The needle, though considerably less pointed than that used by Mr. Liston, is I am satisfied, still too much so to be safe. One more flattened, with a thin rounded end, may be handled with greater freedom and security.

dily accomplished by my friend Dr. Whiting placing his finger between the ends of the ligature and upon the knot, while I tied it.

The edges of the wouud were brought together by three stitches and adhesive plaster. The patient bore the operation, which occupied nearly an hour, with great fortitude. From this time till the 19th, but little constitutional derangement followed. It was remarkable that the pulse in the wrist of the same side, which, previous to the operation, was scarcely perceptible, and which, directly after the artery was tied, could not be felt, was in the evening, as distinct and as large as that in the other arm. The brachial artery also could at this time be felt beating about two-thirds its length, beginning near where the profunda major is usually given off. The arm, for several days after the operation, was generally found in a state of perspiration. The heat was never lessened.

The patient was placed on a very low diet, and kept quiet in bed. He slept well during the night without an opiate, and complained of no uneasiness. In the evening of the second day, there were slight irregularity and intermission of the pulse. Twelve ounces of blood were taken from the left arm, after which the pulse improved; and the following evening the bleeding was repeated with the same effect. After the eighth day, the pulse became quite regular, and varied between 90 and 100. The tumour continued gradually to lessen in size. The wound was dressed on the fourth day, and was found partly adherent, with a discharge of healthy pus from the openings through which the ligatures passed; and it continued to heal well.

(*To be concluded in our next.*)

MELANGE.

New Treatment of Croup.—Professor Recamier has informed the Academy of Medicine at Paris, that he has lately been successful in treating cases of croup, with threatened suffocation, by means of milk and water injected by the mouth and nose at the same time, so as to excite violent convulsions of the throat and muscles of the larynx. This plan has been tried in three cases, in all of which portions of false membrane were expelled. It appears, however, that one of the little patients died; and, although this is accounted for by a "dissolution" of the stomach, we are not quite convinced that the injections may not have had something to do with it. *Anceps quam nullum* is the only principle on which so precarious a remedy can be justified.—*(Revue Medicale, Juin.)*

Galvanic Apparatus.—A new and powerful apparatus has been constructed at the London Institution, by the ingenious W. H. Pepys, Esq. It consists of a single sheet of copper and one of zinc, each fifty feet long and two broad. They are wound round a wooden centre, and kept apart by pieces of interposed hair-lines. The coil and its counterpoise are suspended by a rope over a tub of dilute acid. When lowered into the tub, its electricity is so low as not to affect the electrometer; even a bit of charcoal serves to insulate it; and it can hardly ignite an inch of platinum wire, 1.31^2 of an inch in diameter; but, when the poles are connected by a copper wire, 1.8^2 of an inch in diameter, and eight inches long, it becomes hot, is most powerfully magnetic, and admirably adapted for all electro-magnetic experiments.

Umbilical Tumour.—Dr. Duchateau was called to examine a newborn male child, in consequence of the alarm of the midwife at perceiving a large tumour in the umbilical region. It was regularly spherical in shape, and so transparent, that the parts it contained were distinctly seen through its parietes: part of the liver, ileum, and mesentery, were

thus distinguished; the pulsation of some of the arteries, and the peristaltic motion of the intestines, being likewise perceptible. The tumour measured four inches from above downwards, and three and a half inches in breadth. Care was taken to prevent any injury from friction or compression, and the infant lived eight days.—This case bears considerable analogy to one communicated by Breschet to the Academy of Medicine; at the same time it differs in this, that in the latter the tumour was formed by the lesion and separation of the abdominal parietes, while in Duchateau's case it appeared to be formed by the extreme dilatation of the navel-string, just before it arrived at the umbilicus. This phenomenon occurred so long ago as 1784, at the time when the celebrated Pilate des Roziers was attracting the wonder of France with his balloons, and, as the mother had gone to Versailles, at an early period of pregnancy, to witness one of his ascents, a ready explanation of this monstrosity was afforded, and received such general credit among the gossips of the day, that the Baron de Breteuil, then prime minister, was obliged to interfere to prevent the propagation of human balloons. —*Bulletin de la Societé Medicale d'Emulation, Juin.*

Death of a child, eleven months old, supposed to have been produced by the milk of its mother.—In April, 1821, a person at Munster quarrelled with a soldier, who lodged in his house; the latter drew his sabre, and attacked his host, whose wife, terrified at the danger of her husband, rushed upon his adversary, wrested the weapon from his hand, and threw it to a distance. By this time others had arrived, and the combatants were separated. The woman then, being still greatly agitated by the occurrence, took her infant, who was quite well, out of its cradle, and applied it to her breast. The child quitted the nipple with marks of inquietude, sighed, and remained lifeless in the mother's arms! Dr. Tourtual, of Munster, was called within a quarter of an hour, and administered all the assistance in his power, but without avail. The influence of the mother's milk upon the child has long been known: the passions of nurses, in particular, are unfavourable to their infants, who are almost always affected, under such circumstances, with restlessness, colic, diarrhœa, vomiting, &c.; but we are not aware of any case similar to the present, (related by M. Tourtual,) in which the milk would seem to have acted as a quick and powerful poison. It is to be regretted that no account is given of any examination after death. *(Journal der Practischen Heilkunde, von Hufeland,* 1823.*)*

Sulphur as a preservative against Measles.—During the winter of 1817 the measles prevailed epidemically at Munster, at which time M. Tourtual had occasion to remark that the children affected with itch, and who were using sulphur externally and internally, were exempt from the epidemic. He attributed this circumstance to the presence of another cutaneous disease, and gave it all the merit of the prophylactic virtue. In 1822, a fresh epidemic of measles occurred again, and the disease was preceded for many days by a convulsive cough. For this symptom M. Tourtual prescribed a mixture of flowers of sulphur and white sugar, of which the children took half a tea-spoonful,—more or less according to their age. Many trials were made on children of different families and different ages, and *all* who took the remedy in time escaped the disease.

PROCEEDINGS OF PHILOSOPHICAL SOCIETIES.

Geological Society, June 20.—A paper was read, containing a description of a section of the Crag Strata at Bramerton, near Norwich. By

Richard Taylor, Esq. communicated by John Taylor, Esq. Treas. GS.

This paper was accompanied by a sketch of the crag beds at Bramerton, resting upon the upper chalk, and a table was subjoined containing the respective thicknesses of the series of beds, with a list of such organic substances as belong to each.

A paper was also read, on the Geology of Rio de Janeiro. By A. Caldcleugh, Esq. MGS.

The mountains in the neighbourhood of Rio de Janeiro are for the most part composed of gneiss intersected by granite veins.

A siliceous stalactite was observed by the author to form in this district from the overhanging masses of gneiss, specimens of which were presented to the Society.

As the absence of hot springs makes the occurrence of these stalactites of very considerable interest, Mr. Caldcleugh offers the following hypothesis to explain their formation; the water which in Brazil constantly trickles down the bare sides of the hills, often reaches a temperature as high as 140° or 150° of Fahr. This warm water descending on decomposing strata of gneiss, such as is the case with that from which these specimens are taken, seizes the potash of the felspar, and then acts upon the quartz, and forms a siliceous stalactite. Some of the hot springs or geysers of Iceland do not reach the boiling point, and perhaps the quantity of silex dissolved, the inverse of what is shown to be the case with carbonate of lime, may, in a great measure, depend on the temperature of the alkaline solvent.

June 27.—A paper was read, entitled, "Observations on the Quartz Rock Mountains of the West of Scotland and North of Ireland, more particularly those of Jura, with an Account of the ancient Beaches and Trap Dykes of that Island, accompanied by a plan and sections."

The quartz rock is traced in a succession of districts from Lerwick, in Shetland, to the county of Donegal, in Ireland; and in Jura the thickness of the mass is estimated at ten thousand two hundred and sixty feet. The similarity and singularity of form assumed by quartz rock mountains in districts remote from each other is deduced from the peculiar construction and material of the mountain mass acted upon by powerful aqueous currents. Quartz rock is of great extent in the county of Donegal, where, in one instance, it rests immediately on granite, and at the Muckish mountain contains a bed of pure siliceous sand of considerable thickness.

The author proceeds to notice the ancient beaches of Jura which appear hitherto to have escaped observation; these occur on both shores of Loch Tarbert, and are disposed in six or seven terraces rising regularly from the present shore, above which the highest is elevated about forty feet; the breadth occupied by these beaches, in some instances, amounts to three-fourths of a mile, and their line or extent has been traced eight or ten miles.

The author concludes with a description of, and remarks on, the trap dykes of Jura; these are extremely numerous, and remarkable for preserving courses nearly parallel to each other, and nearly in the line of dip of the quartz rock which they traverse, which gives occasion for offering some reasons to account for that particular disposition.

Quarterly Report of Prices of Substances employed in Pharmacy.

		s.	d.
Acaciæ Gummi elect.	lb.	4	6
Acidum Citricum		24	0
—— Benzoicum	unc.	4	9
—— Sulphuricum	P. lb.	0	8
—— Muriaticum		1	6
—— Nitricum		3	6
—— Aceticum	cong.	4	6
Alcohol	M. lb.	5	9
Æther sulphuricus		9	0
—— rectificatus		12	0
Aloes spicatæ extractum	lb.	7	6

	s.	d.
Aloes, vulgaris extractum	12	0
Althææ Radix exot.	1	8
Alumen	0	6
Ammoniæ Murias	2	2
—— Subcarbonas	2	9
Amygdalæ dulces	2	9
Ammoniacum (Gutt.)	7	9
—— (Lump.)	4	6
Anthemidis Flores	2	0
Antimonii oxydum	6	0
—— sulphuretum	1	0
Antimonium Tartarizatum	8	0
Arsenici Oxydum	2	6
Asafœtidæ Gummi resina lb.	6	0
Aurantii Cortex	3	10
Argenti Nitras unc.	5	8
Balsamum Peruvianum lb.	20	0
Balsamum Tolutanum	48	0
Benzonium elect.	8	6
Calamina præparata	0	6
Calumbæ Radix elect.	12	6
Cambogia	6	6
Camphora	7	6
Carnellæ Cortex elect.	3	0
Cardamomi Semina lb.	7	6
Cascarillæ Cortex elect.	2	6
Castoreum unc.	4	0
Castor Russ. oz.	15	0
Catechu Extractum lb.	5	6
Cetaceum	3	0
Cera alba	3	0
—— flava	3	9
Cinchonæ cordifoliæ Cortex (yell.)	8	6
—— lancifoliæ Cortex (quill.)	12	0
—— oblongifoliæ Cortex (red)	12	0
Cinnamomi Cortex	14	0
Coccus (Coccinella) unc.	2	6
Colocynthidis Pulpa Turk. lb.	8	0
Copaiba	7	0
Colchici Radix (sic.)	4	6
Croci stigmata unc.	4	0
Cupri sulphas lb.	1	0
Cuprum ammoniatum	7	6
Cuspariæ Cortex	3	0
Confectio aromatica lb.	8	0
—— Aurantiorum	2	6
—— Opii	4	6
Confectio Rosæ caninæ	1	8
—— Rosæ gallicæ	2	0
—— Sennæ	2	6
Emplastrum Lyttæ	6	0
—— Hydrargyri	3	6
Extractum Belladonnæ unc.	1	6
—— Cinchonæ	3	0
—— Cinchonæ resinosum	4	6
—— Colocynthidis	3	0
—— Colocynthidis comp.	2	3
—— Conii	0	6
—— Elaterii	50	0
—— Gentianæ	0	6
—— Glycyrrhizæ lb.	5	8
—— Hæmatoxyli unc.	0	6
—— Humuli	0	8

	s.	d.
Extractum Hyoscyami	1	0
—— Jalapæ....1s. 6d. Res.	3	6
—— Opii	4	0
—— Papaveris	0	9
—— Rhæi	1	8
—— Sarsaparillæ	2	0
—— Taraxaci	0	9
Ferri subcarbonas lb.	1	6
—— sulphas	1	6
Ferrum ammoniatum	4	6
—— tartarizatum	4	0
Galbani Gummi-resina	14	0
Gentianæ Radix elect.	1	8
Guaiaei resina	9	6
Hydrargyrum purificatum	5	6
—— præcipitatum album	9	0
—— cum creta	4	6
Hydrargyri Oxymurias unc.	0	8
—— Submurias	0	8
—— Nitrico-Oxydum	0	8
—— Oxydum Cinereum	1	6
—— Oxydum rubrum	5	6
—— Sulphuretum nigrum	0	4
Hydrargyri Sulphuretum rubrum	0	6
Hellebori nigri Radix lb.	2	6
Ipecacuanhæ Radix	17	0
—— Pulvis	19	0
Jalapæ Radix	5	6
—— Pulvis	6	6
Kino	6	4
Liquor Plumbi subacetati P. lb.	1	3
—— Ammoniæ 2 6	5	3
—— Potassæ	1	4
Linimentum Camphoræ comp.	5	6
—— saponis comp.	3	6
Lichen	2	0
Lyttæ lb.	13	0
Magnesia	7	0
Magnesiæ Carbonas	4	0
—— Sulphas	0	6
Manna	5	0
—— communis	3	0
Moschus pod, (32s.) in gr. unc.	46	0
Mastiche lb.	10	0
Myristicæ Nuclei	10	4
Myrrha	8	6
Olibanum	3	0
Opopanacis gummi resina	20	0
Opium (Turkey)	50	0
Oleum Æthereum oz.	2	6
—— Amygdalarum lb.	3	0
—— Anisi unc.	1	8
—— Anthemidis	6	0
—— Cassiæ	6	0
—— Caryophilli	5	0
—— Cajuputi	4	0
—— Carui	1	6
—— Juniperi Ang.	3	0
—— Lavandulæ	2	6
—— Lini cong.	5	0
—— Menthæ piperitæ unc.	3	10
—— Menthæ viridis Ang.	4	6
—— Pimentæ unc.	5	6

	s.	d.
Oleum Ricini optim	6	6
—— Rosmarini.....unc.	0	9
—— Succini.....	0	4
—— Sulphuratum.....P. lb.	1	6
—— Terebinthinæ	1	2
————rectificatum	2	4
Olivæ Oleum .....cong.	14	0
Olivæ Oleum secundum.....	9	0
Papaveris Capsulæ.....(per 100.)	3	0
Plumbi subcarbonas .....lb.	0	8
—— Superacetas	2	0
—— Oxydum semi-vitreum	0	6
Potassa Fusa .....unc.	0	8
—— cum calce	0	6
Potassæ Nitras .....lb.	1	2
—— Acetas	8	0
—— Carbonas	3	6
—— Subcarbonas	1	0
—— Sulphas	1	2
—— Sulphuretum	4	0
—— Supersulphas.....	1	2
Potasse Tartras	3	6
—— Supertartras	1	6
Pilulæ Hydrargyri .....unc.	0	6
Pulvis Antimonialis	0	8
—— Contrayervæ comp.....	0	4
—— Tragacanthæ comp.	0	3
Resina Flava .....lb.	0	4
Rhæi Radix (Russia)	28	0
Rhæi Radix (East India) opt.	10	6
Rosæ petala	7	6
Sapo (Spanish).....	2	8
Sarsaparillæ Radix (Jam).....	5	6
Scammoniæ Gummi-Resina ..unc.	7	0
Scillæ Radix siccat. 1*s.* 6*d.* oz. lb.	5	0
Senegæ Radix.....	3	0
Sennæ Folia.....	6	0
Serpentariæ Radix	6	0
Simaroubæ Cortex.....	4	0
Sodæ subboras.....	2	9
—— Sulphas	0	6
—— Carbonas	5	6
—— Subcarbonas	1	6
————exsiccata.....	5	0
Soda tartarizata	2	4
Spongia usta .....unc.	1	6
Spiritus Ammoniæ..... M. lb.	4	0
—— ——— aromaticus	4	6
—— ——— fœtidus	5	6
—— ——— succinatus	5	6
Spiritus Cinnamomi	3	6
—— Lavandulæ.....	5	0
—— Myristicæ	3	0
—— Pimentæ	3	0
—— Rosmarini	4	0
—— Ætheris Aromaticus.....	6	6
—— —— Nitrici	5	6
—— —— Sulphurci	6	0
—— —— Compositus.....	6	0
—— Vini rectificatus ....cong.	32	0
Syrupus Papaveris .....lb.	2	0
Sulphur Sublimatum	0	9
—— Lotum	1	6
—— Præcipitatum	2	6

	s.	d.
Tamarindi Pulpa opt...	3	0
Terebinthina Vulgaris	0	10
———— Canadensis	6	0
———— Chia	10	6
Tinct. Ferri muriatis	5	0
Tragacantha Gummi	8	0
Valerianæ Radix.....	0	2
Veratri Radix	2	6
Unguentum Hydrargyri fortius....	5	0
———— ———— Nitratis ..	3	0
———— ———— Nitrico-oxy.	3	9
Uvæ Ursi Folia	2	6
Zinci Oxydum.....	7	6
—— Sulphas purif.....	2	6
Zingiberis Radix opt.....	4	0

Prices of New Phials per Gross—8 oz. 70*s.*—6 oz. 58*s.*—4 oz. 47*s.*—3 oz. 43*s.*—2 oz. and 1½ oz. 36*s.*—1 oz. 30*s.*—half oz. 24*s.*

Prices of second-hand Phials cleaned and sorted.—8 oz. 46*s.*—6 oz. 44*s.*—4 oz. 33*s.* 3 oz. 30*s.*—2 oz. and all below this size, 25*s.*

TO CORRESPONDENTS.

The remainder of the Article on PORRIGO FAVOSA, *is postponed until next week.*

CRITO *must also be deferred for a short time, not in consequence of the length of his communication, but from a pressure of other matter, previously received.*

The Editors will feel obliged for the remainder of the case of strangulated hernia; and, as soon as they are favoured with it it will be inserted.

R. G. is under consideration, and will eventually be returned, as directed.

In answer to SYNON *whether* HERACLITUS *was more physician than philosopher, is not our province to determine.*

L. D. from Leeds, may forward his sheets, *we will find a* counterpane *for them, if they deserve it.*

The case of fistula lacrymalis is received, but it wants the authenticity we invariably expect from our correspondents.

R. C. S. will probably favor us with a local habitation,—or, in other words, will transmit us his address.

We promise to insert Scrutator's letter as soon as he fulfils the extent of his engagement.

London:

Printed by E. JUSTINS, 41, *Brick Lane, Spitalfields.*

Published by COX and SON, St. Thomas's Street, and 39, High Street, Southwark. Sold also by Sherwood, Neely, and Jones, Paternoster Row; Simpkin and Marshall, Stationers' Court; John Cox, Berner's Street, Oxford Street; Callow and Wilson, Gerrard Street, Soho; W. Stewart, South Bridge Street, Edinburgh; J. Cameron, opposite the College, Glasgow; Hodges and M'Arthur, Dublin; &c. &c.

THE WEEKLY

MEDICO-CHIRURGICAL & PHILOSOPHICAL MAGAZINE.

No. XXXIII.] SATURDAY, SEPTEMBER 20, 1823. [*Price 4d.*

" FLORIFERIS, UT APES, IN SALTIBUS OMNIA LIBANT
OMNIA NOS, ITIDEM, DEPASCIMUR AUREA DICTA."

Some Account of the Life and Writings of the LATE WILLIAM HEY, Esq.

(Continued from page 114.)

Previously to fixing his residence at Leeds, his former master, Mr. Dawson, had offered to receive him as a partner; but, after much deliberation, this proposal was declined, chiefly from reference to the opinions of his parents. The kind intentions of Mr. Dawson did not, however, terminate here; he expressed a desire that Mr. Hey should reside near him, promising to send to him as many of his surgical patients as would receive his recommendation.

At this period, when Mr. Hey entered upon practice as a surgeon and apothecary, &c. in Leeds, the principal gentlemen of the profession who resided there, were Mr. Billam, Mr. Winn, Mr. Dawson, Mr. Kenion; and of these the last-named person scarcely professed surgery. From the time in which Mr. Hey first engaged in practice, he treated the most serious accidents, and performed all the chirurgical operations that were necessary, never declining any cases which presented themselves on account of their difficulty, or danger; and on such occasions his seniors in Leeds very kindly lent him their countenance and assistance. Mr. Hey, his son, believes that his father performed the operation of lithotomy successfully, three times in his private practice within the first year; " but" he adds, " I cannot specify more in his earliest years, as I find no regular account of cases, till the year 1767, when the Infirmary was opened, I find four cases of lithotomy recorded, and four of the operation for the strangulated hernia, besides various operations of other kinds." During the first years in which Mr. Hey exercised his profession, his progress in gaining business was slow, and his range of practice narrowly circumscribed; and it appears that nearly ten years elapsed, before the regular emoluments of his practice were equal to the expenses of his family. He and his friends were little disposed, at that time, to anticipate the reputation he afterwards acquired, and the long career of successful exertion that was allotted him. Those who engage in the medical profession must be prepared to contend with difficulties, to encounter a variety of impediments, and to undergo the severe discipline of mortification and disappointment, on their first entering into business. The talents and skill of a surgeon cannot be known immediately on his announcing himself a candidate for confidence and employment. He must wait on the slow operations, and on the intervention of circumstances favourable to the disclosing of his professional abilities.

On the 30th of July, 1761, Mr. Hey married Miss Alice Banks, the second of four daughters of Mr. R. Banks, a gentleman of Craven, in Yorkshire. Some acquaintance had been formed with the young lady, during Mr. Hey's residence with Mr. Dawson; but he had entertained no serious thoughts of making her an offer of marriage, till after his return from London.

Mr. Hey was, during one year, from the month of February, 1762,

to February 1763, the medical attendant on the Leeds workhouse; for no public institution appropriated to the relief of the sick and hurt, existed then in that town. The first meeting, which was called for the purpose of establishing an infirmary in that populous place, was on May the 20th, 1767, about eight years after Mr. Hey had commenced business. It was then agreed, that a parochial infirmary should be established.

It is highly probable, that the motion towards founding an infirmary originated with Mr. Hey. This is, however, a matter of inferior importance, since it is quite certain that he engaged more actively in the establishing of it than any other individual, his name appearing in the records of almost all the meetings of committees, for building, forming the laws, &c. Indeed he was the only medical man who was placed on the building committee.* On the first of July, 1768, he received a vote of thanks from the quarterly board, "for the trouble he had taken in relation to the building," with directions "that he be re-imbursed the expence, he has been, or shall be at concerning the same." When the surgeons were to be appointed, only one of the four already mentioned offered his services: this was Mr. Billam, who was elected, as a matter of course. Richard Wilson, Esq. the Recorder of Leeds, and eldest brother of the late Lord Bishop of Bristol, then observed; "as for Mr. Hey we cannot do without him;" he accordingly was appointed.

In the year 1768, Mr. Hey, in conjunction with the principal medical men of the town, formed a medical society, which met once a month, for the discussion of professional subjects and the purchase of medical books.† A subject connected with medicine or surgery was proposed by each member in his turn, which was discussed at the subsequent meeting; the proposer of the meeting being chairman for the evening.

It was about the year 1768 or 1769, that a very friendly intercourse commenced between Mr. Hey and the late Dr. Priestley, who then resided at Leeds; and their intimacy was maintained during several years by an epistolary correspondence, after Dr. Priestley had retired from Leeds. Mr. Hey being acquainted with the chemistry of that period, Dr. Priestley conferred much with him on the subjects of the various pursuits in which he was engaged, and always imparted to him the several discoveries he made in the properties of the gaseous fluids, to which his attention was at that time principally directed. Dr. Priestley in his history of vision, light, and colours, published in 1772, when treating on the immediate seat of vision, had been strongly inclined to regard the choroid coat of the eye, as the part which excited the perception of visible objects; but, it appears, in additions subjoined to that work, that he was induced to doubt of the correctness of this opinion, perhaps to alter it, in consequence of the facts and arguments suggested to him by Mr. Hey.

The high esteem in which Dr. Priestley held the talents and acquirements of Mr. Hey both as a professional man and a philosopher, induced him to propose this gentleman as a proper person to be admitted into the Royal Society. He was elected a fellow in the year 1775, and in a letter apprizing him of that honourable distinction, Dr. Priestley writes,

* It may, perhaps, be regarded as a singular occurrence, that Mr. Hey, who was among the first contributors to the Infirmary, was also the survivor of all the contributors whose names are inserted in the first report.

† The first members of this society were Dr. Milner, Dr. Hird, and Dr. Crowther, physicians; and Mr. Billam, Mr. Hey, Mr. Jones, and Mr. Lucas, surgeons.

" I wish I could say that one of the members in ten, had equal pretensions to it."*

In the year 1773, Mr. Hey received an injury in his knee by striking it against the stone work of a cold bath as he was ascending out of the water. The effects of this accident were aggravated some time afterwards by his horse falling with him. This secoud hurt obliged him to submit to a quiescent state during some weeks; and, after resuming his accustomed exercise, he never regained his original power of walking, but was more or less sensible of debility, and a diminished capacity of enduring fatigue in the injured limb. These injuries laid the foundation of a lameness, which continued during the remaining years of his life.

Early in the year 1778, he received a stroke upon the thigh of his weak limb from his horse, in mounting, which, for a time, threatened to terminate his professional exertions. At this period he was fully engaged in business; his reputation stood high as an operating surgeon; persons came from the remote parts of Yorkshire to Leeds, that they might be under his immediate care; and he was frequently called to considerable distances from Leeds in cases of difficulty and danger. Mr. Hey had now a large family, and was soon to be the parent of an eleventh child. His rising fame presented before him a reasonable prospect of distinction and emolument, as creditable to himself as advantageous to his family. Amidst the full tide of this honour and prosperity, he was disabled from using all active exertions; the remedies which were employed by his own direction, or by the suggestion of professional friends were of little benefit to him; and it appeared probable to himself, and to those who were qualified to judge of his case, that he never would regain the power of walking.

(*To be continued.*)

* " The only person in Leeds who gave much attention to my experiments was Mr. Hey, a surgeon. He was a zealous methodist, and wrote answers to some of my theological tracts; but we always conversed with the greatest freedom on philosophical subjects, without mentioning any thing relating to theology. When I left Leeds, he begged of me the earthen trough in which I made all my experiments while I was there."— *Memoirs of Dr. Joseph Priestley*, &c. p. 63.

OBSERVATIONS *on* FRACTURES *of the* NECK OF THE THIGH BONE. *By* SIR A. COOPER, BART, F.R.S. SURGEON TO THE KING, *&c. &c. &c.*

(Continued from page 118.)

Cause of the fracture of the neck of the bone within the capsule.—It is said, page 20*—

" That it must be broken by a contre-
" coup, either by a fall on the trochanter,
" the feet or knees: the former of these
" is by far the most frequent cause.—
" Dessault says, that, in his practice
" twenty-four cases in thirty were pro-
" duced this way."

These observations, our author adds, are quite contrary to his experience; for fractures, as he observes, of the neck of the thigh-bone within the capsule, have been often produced by violence which acted perpendicularly; or they have been occasioned by a sudden rotatory motion of the pelvis upon the thigh-bone; the violence producing its effect by acting with the advantage of a lever upon the neck of the bone; but in fractures external to the ligament, they are produced generally by severe blows from falls upon the trochanter itself; in the former case, the patients are often sensible of the injury before they fall, and fall in consequence of it, and therefore, the accident is commonly imputed to the fall; but in fractures external to the ligament, the blow forces the trochanter towards the neck of the bone, and the trochanter splits and receives the cervix into its cancelli.

With respect to Dessault, says our

* Practical Observations on Surgery, by Mr. Earle.

author, whose practice for a short time ' I had an opportunity of witnessing, and for whose character I have the highest respect, like some of our English surgeons, he confounded the three fractures of the upper part of the thigh bone, under the general terms of' " fracture of the neck of the thigh bone."

Page 22.—" Diagnosis.—Where a person previously in full possession of the " locomotive powers of his limb, after the " receipt of any injury, and particularly a " fall upon his trochanter, becomes suddenly deprived of that power; accompanied by a remarkable consciousness of incapacity in the injured member; and when, from the position and " direction of the limb, it is obvious that " there is no dislocation, a strong presumption must arise that a fracture has " taken place.

Again, page 23.—" I cannot quit this " subject without deprecating, in the " strongest terms, the cruelty and impropriety of what is termed satisfying " yourself that there is a fracture, and its " precise situation."

Page 24.—" To return;—this symptom " of a total and sudden privation of the " power of motion, after a fall on the " trochanter, should always be regarded " as diagnostic of a fracture."

' Good God !' exclaims our author, ' is this written by an English surgeon, in the land of John Hunter, the minute investigator of nature, whether in health or disease ? This is indeed cutting the gordian knot! what ! shall not the surgeon satisfy himself there is a fracture, and its nature, before he exposes his patients to a confined position of great duration ? for, if the surgeon be not suffered to examine the limb, when is that confinement to terminate ? Are such doctrines to be taught, such advice to be given to young men just embarking in their profession, that they need learn nothing of these cases ? *For if a man has a full, and a consciousness of inability, his limb is decided to be fractured !* Certainly it will save a great deal of time in studying the profession, and a great deal of trouble in knowing the nature of the case the surgeon is called upon to treat.'

And, observes Sir A. if the advice which the author has given in the foregoing quotations, is adopted by young men, who come to London for instruction, when they return into the country to settle in practice, they would all be ruined.

The following case is given in illustration.—' When young in practice, in the city, continues Sir A. I was asked to visit a person who, I was informed, had a fractured leg. He said, " I wish you would examine my leg and see if it be broken." I did so, and perceived a swelling on his tibia, above the middle of the bone, which had arisen from a very severe blow : I said, " this is not a fracture but merely a bruise, with considerable extravasation of blood." He then informed me, that he had received the injury near a fortnight before; and when raised from the ground, being unable to bear the weight of his body upon the limb, sent for a surgeon, who pronounced his case to be a fracture,—bound up his limb in splints,—and left him to a comfortable repose of six weeks in bed.'

' In the morning on which I saw him, his bed having become uneasy to him, he had been lifted from it, to a chair by its side, whilst his bed was making. Finding that his leg was not painful, he was induced to put it down, to discover if he could bear upon it; and being able to do so, he removed the splints and sent for me. When informed there was no fracture, he was exceedingly irritated against his surgeon, and threatened a prosecution for loss of time, of business, and, consequently, of property, produced by this confinement ; but I pacified him, and wrote to the surgeon to go immediately, and the matter was concealed from the public eye, and amicably adjusted.'

Here our author appeals to his professional brethren whether such a man did not deserve severe punishment for his ignorance, or the very

careless examination he made of the injury.

'I have been several times,' continues Sir Astley, 'consulted respecting cases of undiscovered fractures and dislocations, and for others supposed to exist, which had never happened; and have long since learned not to give my opinion to a patient, but to convey it by some other means to his surgeon, that I might not injure his reputation; but if such doctrines as these were promulgated and adopted, I should be entirely occupied in concealing the mischiefs which they would produce on the character of professional men.'

'I would also ask any medical man who has had an opportunity of seeing such practice, if he has not witnessed cases in which persons, by a fall upon the hip joint, have been unable to stand upon, or to move that limb; but who, in a few days, by the use of crutches, had recovered its powers, and used it as well as before?'

In page 84, it is said—

"*Now if the generality of Sir Astley's* "*patients, and particularly those in Guy's* "*Hospital*, have had all these indications "of fractures demonstrated upon their "persons, it is not difficult to understand "the shortening of the limb, and destruction of the fibrous periosteum which he "has found in fractures within the capsule."*

'With respect to my own cruelty or inhumanity,' adds our author, '*particularly to the patients of Guy's Hospital*, God forbid that I should be the advocate of a cruel, coarse, or unnecessary examination, and no one has a right to accuse me of it; all I have recommended may, and ought to be done with gentleness. Ask my greatest enemy, and let his answer decide, whether the poor of London,* and the patients in Guy's Hospital, are or are not, anxious to place themselves under my care; but I have here to observe, that those who shoot at random must take care they do not wound themselves;—this is well exemplified in the production I am analysing; for, if I were disposed to be severe, what inferences might not be drawn from the following case of fracture of the thigh-bone, given in that work, page 30.

"Daniel Spilling, forty years of age, "was brought into St. Bartholomew's "Hospital in November, 1820. He stated "that, as he was walking in the street, his "foot slipped, and he fell on his right hip. "He got up, but was totally incapable of "moving, or bearing any weight on the "affected limb. His clothes were taken "off, and whilst he was in the erect posture, no difference whatever could be "detected, either in the length or position of the limb, *which admitted of being* "*moved with considerable freedom in every* "*direction*, and with less pain than is "usual in fractures. On placing him in "bed no deformity was manifest; and, in "consequence of the doubts which were "entertained of the existence of fracture, "the limb was *examined with great free-* "*dom, and for a considerable time.* He was "directed to lie on his right side, with "the thigh bent on the pelvis. This po-"sition gave him great pain in the hip, "and *soon became intolerable, from the un-* "*easiness it caused in the region of the liver.* "His health was greatly deranged at the "time of his admission, and he became "completely jaundiced. *Very little atten-* "*tion was paid to the limb,—his health be-*

* This passage is, perhaps, one among the least generous and uncalled for, that is to be met with in the course of the "Practical Observations," and well might the author have spared it. Its absence would have detracted nothing from the merits of his production.

Were we disposed, or were it at all necessary to pay a compliment to the firmness, humanity, and sensibility of Sir Astley Cooper, either in operating or investigating cases of acute disease, we could not stop at better place to testify our high esteem for him, as a man and a surgeon—and not only for his super-eminent talents alone, but for that universal philanthropy, urbanity and feeling, uniformly manifested, on all occasions, to every class of his patients. Fulsome and frail indeed might this eulogy appear, did it stand upon the assertion of one individual, but where it is stamped by the impartial declaration of living thousands, it is too well confirmed to be doubted; and stands too firm to be shaken by the inuendoes of invidious emulation, from whatever quarter they may originate.

* If Sir Astley had said the afflicted sick and needy poor of all England, he would have been equally as correct.

" *came daily worse,—and he died on the ele-*
" *venth day after admission.*"

Comment were needless here, as well as an insult to the good sense of our readers. Who can peruse the preceding case without being struck with the manifest anomalous contradictions which it embraces? And who can read the following paragraph without equal admiration of the heroic valour and magnanimity which our author displays, at the very moment he has it completely in his power *to floor* his antagonist without the possibility of his ever coming again *to the scratch.*

' For the world I would not,' says Sir Astley, after all the bombast of his opponent, ' if I were able, say any thing which could lessen the character of St. Bartholomew's Hospital, or hurt the feelings of any of its medical officers. I know well the excellence of the institution, the admirable manner in which it is conducted, and I live, and hope to live, in harmony with its surgeons; but I cite this case from the work before me, to shew that attacks upon the character of an hospital, and of an individual connected with it, might lead to retaliation, but, IF I COULD STOOP TO DO SO, I SHOULD CONSIDER IT BAD TASTE. The rivalship of hospital surgeons ought to consist in, who should most advance the science of his profession, and who should exert himself the most in lessening the scenes of human suffering.'

' It was probably,' continues Sir A. ' from want of sufficient attention to a careful examination of an accident, which led our author not to discover a fracture of the olecranon until the sixth morning after it had happened:—see pages 144, 145—For he says page 146—

" I now (on the sixth morning after the
" accident) most distinctly ascertained
" that the olecranum was fractured."

' Surely this ought to have been discovered earlier.'

(*To be continued.*)

DR. GALL.

PHYSIOLOGY OF THE BRAIN,

(Continued from page 116.)

But others have gone farther than either Haller or Sœmmering: it is pretended that turtles continue to couple and to eat after the brain has been removed; Duverney is quoted, who says that the whole brain of a pigeon was removed, and that nevertheless all its functions continued the same as if nothing of the kind had taken place.

" It is very certain," says Le Gallois, " that birds continue to live for some time and even to run and walk about after their heads have been cut off. The following *trait* of the emperor Commodus has recently been cited, who, while the ostriches were running about the circus amused himself by cutting off their heads with arrows cut in the form of a crescent; these animals ran about without their heads the same as before they had lost them, and only stopped when they became exhausted."

" Several physiologists have obtained similar results by cutting off the heads of turkeys, cocks, ducks, pigeons, &c.* Besides, we are assured by some authors that a calf walked a considerable distance without its head; that a woman under similar circumstances advanced some paces; that a man was able to handle his sabre and to brandish it about three different times; that another struck his breast with both his hands," &c.

Let us now see what Le Gallois has taught by all these miracles!

He says in the preface of his work, " But I am far from pretending that it (the brain) has not an equally great and necessary influence over the other parts of the body. On the contrary, I acknowledge that it is the brain which *determines* and *regulates* every

* Experiments on the principles of life, p. 7, 8, and 9.

act of the animal functions. For instance, when I move my arm, *the principle of this motion emanates from the spinal marrow*, and not from the brain; but it is the brain that has willed this motion, and it is the brain which has guided it in the direction appropriated to the object for which I did it. Cold-blooded animals furnish us with a sufficiently evident proof of what I here advance. When the head of a salamander is cut off about the first vertebræ, it continues to live for several days; but, although it may move its body and limbs with the same degree of strength as would be necessary to carry from one place to another, it nevertheless remains on the same spot, and it may be left with a little water upon a plate without any fear of its escaping. If its motions be examined, it will be perceived that they are irregular and indeterminate. It moves its paws in opposite directions to each other, so that it is impossible for it to advance, or if it make one step forward it immediately makes another backward. The same is observed in frogs without the head; they are not able to leap, and if they do make a spring or two, it is only inasmuch as their hind legs meet with some *point d'appui*. If they be laid upon their backs, they shake themselves at times in order to change their situation, but still they remain in the same place, because they are no longer able to make the necessary motions to replace themselves upon their belly."

How are we to conciliate these experiments of Le Gallois, and the above facts which he relates with so much good nature.

In another place, this physiologist says, "It may so happen that reptiles deprived of their heads may continue to govern their motions and to walk; but if attention be paid to this circumstance, it will be found that in all these cases the decapitation has only been partial, that it has been performed upon the cranium, and that the posterior part of the brain has remained united to the body." But immediately after he affirms, "that sentiment and voluntary motion may subsist and be kept up by insufflating the animal (cold-blooded) beheaded; that it is not only the internal functions which subsist (in the acephalic fœtuses) but in like manner a part of the animal functions, since voluntary motions take place." The whole work then on the principle of life, notwithstanding the eulogia bestowed upon it by MM. les commissaires of the first class of the institute, is but a tissue of vague and contradictory ideas, where the author always confounds the phenomena due solely to vegetative life, with those of animal existence, where he constantly errs in attributing to sensibility that which is only the effect of sensibility, &c. How can it be expected that experiments of this nature, which, when repeated by other hands, furnish always different results, should lead to truth.*

Darwin's observations are affected with the same vice, consequently they are as little to be depended upon. This physiologist maintains that the fœtuses of animals have sensations and are capable of voluntary motions; that they experience hunger, that they open and shut the mouth or the beak, that they swallow a part of the fluid with which they are surrounded, that they lick themselves and swallow a number of hairs, and that they even attempt to walk and to jump.†

* The experiments of Le Gallois, which might the more easily cause the effects of irritability to be confounded with those of sensibility, have only succeeded on animals which come into the world in such a state of imperfection that they enjoy little more than a vegetative existence. According to this author himself, the same experiments do not succeed on animals which come into the world in a more perfect state.

† Zoonomia, or Laws of Organic Life, by Erasmus Darwin, vol. i. sect. xvi. 11. p. 231—233.

But let us suppose that the existence of all these phenomena could be demonstrated, it would in no manner on this account be a proof that they were not produced by means of the brain; for, although the brain, even for some time after birth, may not be in a fit state to exercise the superior functions, those of its parts which are destined for the inferior order, may be well enough developed, even before birth. Do we not see that some animals, for instance, foals, calves, chickens, &c. have, at the time of their birth, the brain and organs of sense so well developed, that they are capable of much higher functions than deglutition and voluntary motion.

To shew how many contradictions are worked up with the preceding experiments, M. Spurzheim resolved upon performing some of them in my presence.

If the greater part of both hemispheres of the brain of pigeons and fowls be removed, and a noise be made, these animals distinctly manifest that they still continue to see and hear. In our experiments, none of these animals so mutilated could eat without assistance, but when bread or any other aliment was placed in their mouths, they swallowed very well. Hares which we mutilated in the same manner equally saw and heard: they moreover ran about and eat without assistance. But never in any of these cases had either the cerebellum or the whole of the brain been extracted. Whenever the lesion penetrates as far as the basis of the brain, or when any attempt is made to take out the cerebellum, the animals die immediately, and even the destruction of the nerves and senses become inevitable.

All then that can be inferred from these experiments is simply this—that it is not the whole cerebral mass that is necessary to voluntary motion, or that the organs should fulfil their functions. But it cannot be decided by experiments designedly undertaken, whether any portion of what is properly called the brain, be necessary to the production of voluntary motions, or that the organs of the senses may act, nor what part of the brain becomes indispensable for this purpose.

It then may be admitted as certain, that all these pretended experiments on decapitated animals, which manifest sensibility, and which were still capable of voluntary motion, have been inspired by a puerile propensity for singular results, that they have not been made, but that they have been imagined upon false suppositions.

I have, nevertheless, strong reasons to suspect that various systems which do not belong to the brain, without any intervention of the latter, may receive impressions, that is, may have sensations and conscience; that they may preserve the remembrance of received impressions, and that they are capable of animal spontaneity.

(To be continued.)

PORRIGO FAVOSA,

(Concluded from page 100.)

M. Lorry has made an observation on this subject, which does not appear to be correct. He says, when the glands of the neck are swelled, the eruption is immediately removed from the face; but that it appears again as soon as the swellings subside.

Children, from ages of one to five years, are most liable to the Porrigo favosa on the face. In almost every case, the eruption is attended with a discharge from behind or from within the ears, with swelling and hardness of the upper lip; with enlargement, and often ulceration of the glands, about the neck or throat: and with inflammation of the eyes, or obstinate ulcerations of the ciliary glands. These appearances take place in the order above stated, though with a few exceptions. The times in which

they occur, vary, in different instances, from two or three weeks, to two months; and therefore the whole duration of the complaint is rendered very uncertain.

Adults are occasionally affected with this form of the Porrigo. The eruption is usually preceded by pains of the stomach, or pains of the head, with giddiness, and general debility. The pustules appear round the mouth and eyes, and on the ears, but more particularly on the cheeks, where they are large, numerous, and much inflamed at the base. In a few days, they become confluent, break, and discharge a great quantity of clear, viscid matter, which concretes into thick, irregular masses of yellow scab, encrusting nearly the whole face. In some cases, the eruption is confined to the surface on which the beard grows. The pain and inflammation attending the pustules, render the operation of shaving almost impracticable.

3. The Porrigo favosa affects the trunk of the body, and the extremities, as well as the face and scalp. It sometimes appears on the arms, back, thighs, ancles, and feet, in distinct blotches, similar to those on the face, often cotemporaneous with them. Deep and obstinate ulcerations are formed at the root of the toes, on the ancles, and heels. The ends of the toes are likewise ulcerated, the pustules arising even under the nails. In infants less than one year old, I have seen this complaint uniformly diffused over the whole surface of the body, and particularly severe. The eruption consists of achores partially mixed with the favi. It appears in general, first on the feet and ancles, and afterwards extends to the abdomen, and chest, then round the waist to the arms, neck, and head. There is not much inflammation round the pustules, but after they are broken, a considerable discharge takes place of a clear, unctuous fluid, which gradually concretes into irregular yellow scabs. In some places, as on the abdomen, and sides, when the pustules are small, and not confluent, the scabs are slight, and laminated, and presently separate from the surface. As the eruption proceeds, the inguinal, and axillary glands, and perhaps those of the neck, become hard and enlarged: some of them finally inflame and suppurate. Infants suffer much both from pain and itching in this complaint, often for two or three months together, since fresh pustules continually arise on the places from which the scabs have been removed. Dr. Underwood, in describing this eruption, compares it to the Psora of the Greeks, or to the disease termed by us the Grocer's Itch. He says, "It often begins about the arms and thighs, but always extends soon afterwards to other parts, and frequently spreads quite from the head to the feet. It appears on some parts in very small eruptions, like the points of pins, with watery heads, and in other parts, as large as peas, and sometimes in foul blotches, which, after breaking, form sores and broad ugly scabs. These die away, and the like appear successively in other parts, sometimes for two or three months, leaving the skin of a dirty adust hue. In other parts, the eruption is in the form of small hardened pimples, which do not break, nor are at all hard to the touch. This eruption appears alike in children who have cut all their first teeth, and in infants at the breast; though I have happened to see it, I think, more frequently in teething children; and it then seems to be connected with dentition, and this has appeared pretty evident, because, previous to my being acquainted with the remedies best adapted to the complaint, children who had taken a variety of medicines, and continued to break out in fresh places, suddenly got rid of the eruption altogether upon my lancing the gums; and three or four teeth in consequence coming through. When this eruption has

appeared in infants at the breast, I have several times known the suckling mother or nurse, in a few weeks afterwards, break out in like manner with the child; but whether by accident, or from contagion, I have not been able to ascertain. I was for a while much puzzled with this ill looking eruption, the long continuance of which could not fail to be very distressing to the parents, and has even caused a suspicion to rest on the wet nurse; the eruption being sometimes suspected to be the itch, and at others, venereal, which it certainly is not. It has always been benefited for a while by washing the parts with two drams of the aqua Kali puri in a pint of water, which I would always recommend, though it will not alone effect a cure. Various internal remedies also, which remove other eruptions, have generally failed in this, such as the Hydrargyrus cum cretâ, and Hydrargyrus cum sulphure, given in large doses, as also the Sium Aquaticum. The external application, however, of an ointment. consisting of the unguentum Sulphuris, and unguentum Hydrargyri nitrati, with a greater or less proportion of the latter, has hitherto never failed me, together with the internal exhibition of one or other of the foremen-tioned remedies." Vol. i. p. 104-6.

From Paris' and Fonblanque's Medical Jurisprudence.

(Continued from page 122.)

A CLASSIFICATION OF THE DIFFERENT MODES BY WHICH POISONS PRODUCE THEIR EFFECTS.

1. *By acting through the medium of the nerves, without being absorbed, and without exciting any local inflammation.*

a. By which the functions of the nervous system are destroyed.

Acrid.	*Narcotic-Acrid.*
Aconite.	Alcohol.
Jatropa Curcas.	Oil of Tobacco.
Narcotic.	
Essential Oil of Almonds.†	Camphor.
	Opium.†

b. By rendering the heart insensible to the stimulus of the blood.

INFUSION OF TOBACCO.
Upas Antiar.

II. *By entering the circulation, and acting through that medium with different degrees of force, on the heart, brain, and alimentary canal.*

Corrosive.	*Acrid.*
Arsenic.	Hellebore.
Emetic Tartar.	Savine.
Muriate of Baryta.	Meadow Saffron.
	Squill.
Narcotic.	*Narcotico-Acrid* e‡
Opium.‡	Deadly Nightshad
Lettuce.	Hemlock.
Henbane.	Camphor.‡
Prussic Acid.	Cocculus Indicus.

III. *By a local action on the mucous membrane of the stomach, exciting a high degree of inflammation.*

	Acrid.
Corrosive Sublimate†	Bryony.
Verdegris.	Elaterium.†
Muriate and	Colocynth.†
Oxide of Tin.	Camboge.
Sulphate of Zinc.	Euphorbium.
Nitrate of Silver.	Hedge Hyssop.
Acids.	Croton Tiglium.
Alkalies.	Ranunculi.
Cantharides.	

The preceding classification of poisons will not only furnish the practitioner with a general theorem for the administration of antidotes, but it will suggest the different modes and forms of administration of which each particular substance is susceptible; it will show that certain poisons may occasion death without coming into contact with any part of the alimentary canal, and that others will produce little or no effect, however extensively they may be applied to an external surface. The first class comprehends such poisons as operate, through the medium of the nerves, upon the organs immediately subservient to life; in the applica-

---

† This mark denotes that the substance against which it is placed, may also act by being absorbed.

‡ Signifies that the article has a local motion.

tion of such agents it is obvious that they cannot require to be introduced into the stomach, they may convey their destructive influence by an application to any part duly supplied with nerves, and whose extremities are exposed to their action; although at the same time, it may be observed that, in general, poisons of this kind act most powerfully when internally administered, owing to the extensive sympathetic relations of this central organ over every function of the living body. The second class consists of poisons that are incapable of producing any effect, except through the medium of the circulation; whence we shall be enabled to explain and appreciate the various circumstances which may accelerate or retard their operation. Poisons of this class may be applied externally to abraded parts, or even to surfaces covered with cuticle, provided their absorption be promoted by friction; and it may be here observed, that the function of absorption is not performed with the same force in every tissue; as a general proposition, it may be said to be energetic in proportion to the number of lymphatics and veins, although the late experiments of M. Majendie have shown how greatly it is influenced by the state of the circulation. If these poisons be administered internally, they find their way into the circulating current either through the branches of the thoracic duct, or those of the *venæ portarum;* when, as if by a species of election, each substance very frequently expends its venom upon some one particular system of organs. Many of the substances arranged under this second division have moreover a local effect upon the structure with which they first come in contact; it is thus with colocynth, and some other bodies; while, on the contrary, several of those poisons which are distinguished for their *local action*, are subsequently absorbed, and are thus, as it were, enabled to ensure their work of destruction by a double mode of operation. We shall receive ample evidence of this truth, as we proceed in the history of particular poisons. The third class comprises such agents as inflict their vengeance upon the mucous membrane of the stomach, by actual contact, and destroy, by exciting local inflammation.

(*To be continued.*)

The following humorous and satirical description of the Anatomy of the Brain, is ascribed to the learned Antiquary, Dr. Stukeley.

MICROCOSMOGRAPHY.

"We frequently express our astonishment at the incoherent ravings uttered in a paroxysm of lunacy; but this wonder will cease when we consider the structure of the brain, as described by anatomists: indeed when we reflect on the heterogeneous composition of it according to medical writers, we ought to be surprised at the existence of any portion of rationality in the human race."—*Herman Goltz, de cerebri topographia et nomenclaturâ.* 8vo. Argentorat. 1737.

My laborious investigation of the Spleen* having now become familiar to the medical profession, I proceed to make some observations on the human Brain. In my researches on this subject I have derived considerable assistance from the work of Mr. Herman Goltz, who passed many years in anatomical examinations of that delicate viscus, endeavouring to discover some coincidence between its marvellous structure and its important uses. To this end the whole concentrated force of his acute intellect was directed: sometimes he was elevated by the hope that he had ascertained the source of the reasoning faculty and the nest in which the passions are hatched; but these gleams of success were transient, and were succeeded by total obscurity. At one period he conceived that he had actually drawn aside the curtain, and beheld the mysterious processes that are performed in the occult laboratory of nature; but he confessed himself deceived, and afterwards candidly acknowledged that the curtain itself was a mere delusion. Exhausted by these al-

---

* This work by Dr. Stukeley was first published in 1723; and as it wholly failed in discovering any use for that organ, it may be presumed to have gone through several editions.

ternations of hope and disappointment, the fabric of his understanding gave way, and in a moment of despondency he hanged himself in his dissecting-room, and was nearly devoured by the rats before his loss was discovered and his fate deplored.

His work on the Topography and Nomenclature of the Cerebral Mass is still extant, though of the utmost rarity; and as he may literally be said to have worked his brains to an oil, this treatise may be justly considered as a brightly burning lamp to assist the lucubrations of future anatomists.

Before he accomplished his rash resolve, he wrote on a slip of paper the following impressive words: "For more than twenty tedious years I have pursued a phantom, an *ignis fatuus*, that has decoyed me into misery and ruin. My vision has become so dim that I can no longer distinguish the objects of my research; my hand is too tremulous to hold the scalpel. Confined in this charnel-house, I have been estranged from Nature's fair and inviting prospects; I have cultivated no man's friendship, nor sought for the affections of woman. I have indeed read of the charms of society, the exhilirations of wine, the delights of a domestic partner, and the blessedness of children; but I have been a solitary student; water has been my only beverage; no female can reproach me with attachment, nor can a child curse me for its existence. To live longer is useless; the past has been misemployed, the present is wearisome, and I will anticipate the future." Thus terminated the uneventful life of Herman Goltz, whose duration in this world may be considered to have been merely a protracted incarceration, aloof from any participation of its enjoyments. I now proceed to a summary of his labours.

To the disgrace of the medical profession the different parts of the brain have been likened to every thing which they did not resemble; but fortunately, to prevent detection and exposure, this superlative nonsense seemed to wear the garb of learning by being wrapped up in worse than gallipot-Latin; and it is presumed that the present is the first attempt at a correct translation. To this moment we are ignorant of any intellectual operation performed by any particular portion of the brain, and are equally at a loss to discover any relation which the whole mass bears to thought or sentiment. Our embarrassment is rather increased than relieved by the terms applied to the topography of the organ, which are not only arbitrary, but absurdly inconsistent. The latinity often defies translation, and presents figures as whimsical as that of a barber-surgeon with his lather and pewter-basin surmounted by a Roman helmet.

The human head bears considerable similarity to a cocoa-nut, which by general consent is supposed to exhibit the countenance, at least, of the monkey. After stripping off the tough integuments you come to the shell, or skull; and when this has been cracked, or, more scientifically, sawn through, you arrive at the internal covering, which being removed, discloses the kernel.

The intellectual nucleus of man is enveloped in membranes, or tunics, which have strange uncouth names; for although according to the anatomical nomenclature this brain is, to use an expression of Milton,

"The brood of folly without father bred,"

the male parent being *non inventus*, yet it has two membranous mothers, ladies of very different tempers; one being extremely obdurate, is called the *Dura Mater;* the other, more closely in contact with the brain, highly indulgent, and of course frequently spoiling it, is denominated *Pia Mater.* That no petty contentions respecting cleanliness or domestic economy may arise, a cobweb shawl, *tunica Arachnoïdes*, is interposed between them. Many philosophers have imagined that in this filmy veil may be traced those fine-spun theories which have in all ages interested and agitated mankind to no useful purpose. This gossamer mantle is the medium of discrimination, the thin partition that separates wit from madness, piety from cant, and dramatic excellence from ranting and buffoonery. In the healthy state this flimsy covering is pellucid, clear starched by nature, resembling those delicately attenuated fabrics that in former times screened the necks and shoulders of personable females, and which did not wholly prevent the eye from penetrating through the covering intended for concealment.

There are some peculiarities of the obdurate lady which merit attention. By a strange metamorphosis she is doubled into the shape of a sickle (*falx*,) which seems intended not to reap any intellectual harvest, the usual destination of such instruments, but to separate the hemispheres of the brain; and the pointed part of this sickle is attached to a cock's-comb (*crista galli.*) In other instances this tough and nominally intractable lady is converted into canals (*sinus*,) probably the invention of some Dutch anatomist; then into the wine-press of Herophilus; and finally, into a tent or marquée (*tentorium*,) which in the opinion of many sagacious persons is

supposed to refer to the Nomadic origin of the human race, the vestiges of which still remain among the pastoral tribes of Tartary, and nearer home in the families of gipsies.

We come now to the third coat, which, notwithstanding the vulgar adage about keeping the head cool, shows that the brain likes a warm birth, and enables us to trace to a natural instinct the practice of wearing nightcaps, wigs, and false hair. In all powerful exertions of mind the head requires comfortable clothing: this truth we find exemplified in our courts of law, where judges and barristers carefully protect the temple of thought with a wig, full-bottom cauliflower, or tie; the courage of our brave soldiers becomes more animated by a helmet; the quakers, a politic people, always keep their hats on; and criminals on the gallows, whose exit is a matter of importance, are furnished with a night cap; while the students in Christ's Hospital,—a seminary that has rarely produced any considerable philosophers,—usually walk about bare-headed. This third coat is called the *Pia Mater*, which means the kind and indulgent mother of membranes; but this is evidently a misnomer, for when it becomes inflamed the patient is disposed to all sorts of mischief, violence, and devilish tricks. This kind mother may be traced into all the sinnosities, contortions, and mysterious cavities of the brain, which it lines like tapestry or paper-hangings.

To survey the entire topography of the cerebrum would be a task equal to an examination of the compartments and furniture of an Egyptian pyramid; a bewildering operation, like that of taking the stock of a general shopkeeper in a country town; especially as many parts have half a dozen different names. We shall therefore only enumerate an abridged catalogue of the rarities to be found in this type of Noah's ark, to use a simile adopted by the learned Goltz (p. 187.) with great propriety, as the brain is supposed to be a double organ, all the nerves going in by pairs.

The substance of the brain is likened to wood; and indeed the heads of many gentlemen bear out this comparison: the external part is supposed to be the bark, the internal the pith, and for all intellectual purposes the latter is esteemed vastly superior, though no reasons are offered for this preference. This cerebral wood is divided into hemispheres and lobes; after separating these you arrive at callous substance. Strange unmathematical figures also occur in the shape of oval and semicircular centres. In this thinking apparatus there are stomachs,—a provision of nature strikingly consonant with the remark of Rabelais, "*tout pour la tripe.*" The superior stomachs are furnished with horns, and these perhaps are the only weapons now left for the defence of literary property. The superior or lateral stomachs are separated by a transparent partition called *septum lucidum*. In its fore part is found the cleft of Silvius, underneath the vault, or arch, (*fornix;* a term also used to designate certain mansions to be shunned by those who dislike late hours and bad company,) which vault, after the fashion of quadrupeds, has four legs, of which the two hinder are denominated the feet of the sea-horse, and by some dissectors, from their mutual dissimilitude, Ammon's horns. Shortly afterwards you arrive at Monro's hole, and the interest now begins to thicken: a funnel conducts to the third stomach, and this contrivance has evidently led to the practice of drenching, employed when man or beast is averse to taking physic. Next in order comes a psalm-book, or harp, it not being determined which comparison is most applicable. The funnel leads to the pituitory, or snivelling gland, which is situated in the Turk's saddle.

In this third stomach, which resembles a chink, there is a passage to the fourth stomach, termed the aqueduct of Silvius; and in this passage, from the third to the fourth stomach, are certain parts which cannot with propriety be named, but which more discreet anatomists have termed the four-doubled little tubercles, and the pine-apple gland, which Descartes imagined to be the seat of the soul. It usually contains, besides this immortal and immaterial *je ne sais quoi*, a quantity of hard gritty matter, which has exceedingly *gravelled* the disciples of our learned psychologist.

This specimen of erudite jargon respecting the brain will, it is hoped, be fully sufficient both for the general and the professional reader; we may however add, that there is snugly situated under the tent a little brain, bearing the appropriate name of cerebellum, which, when cut in a particular direction, presents an arborescent appearance. It has hence been called the tree of life; it likewise contains the fourth stomach, the interior part of which is called the *pen*, for a reason to us undiscoverable; therefore we may as well take it as a hint to drop that with which we are now writing.

That the brain, when properly developed and unfolded, may be accurately described in intelligible language, there can be no doubt; that its separate parts may be ap-

propriately denominated is equally certain; and that this may be accomplished in such a manner as to aid the student in acquiring its topography, is clearly evident. But to realize these very desirable advantages, we must utterly and unanimously renounce the unphilosophical, incongruous, and fantastical nomenclature, which has for ages been suffered to disgrace this important department of physical science.

MELANGE.

Difference between Indigenous and Levant Opium.—M. Ricard Duprat, a chemist at Toulouse, informs us that a lady of that city, who suffered excruciating torment from a cancer, was unable to procure relief from opium as usually given, although she took as much as an ounce in the week. Extract of poppy-heads was substituted, with the best effects, producing freedom from suffering, and occasionally tranquil sleep. The extract was prepared as follows:—the poppy-heads were carefully cleaned of the seeds and stalks, bruised in a mortar, and infused in cold water for twelve hours; they were then repeatedly boiled in fresh quantities of water; the liquor was passed through linen of very close texture, and evaporated. Of the extract thus obtained, an ounce was divided into forty-eight pills; but we are not informed how many of these the lady took for a dose. M. Duprat, in reasoning upon this subject, gives it as his opinion that it is nearly impossible to free the opium of commerce from a certain quantity of resin, while the native extract contains scarcely any. If then, says he, it be true that the resins in general, and that of opium in particular, act by producing irritation, can we be astonished at obtaining more satisfactory results from the one than the other?—M. Robiquet, in remarking upon this communication, gives a more scientific account of the matter. Vauquelin has ascertained that the extract of poppies reared in these parts contains *morphine*, although in smaller quantity than the opium of the Levant; and many practitioners of respectability have described the indigenous opium as purely sedative in its effects. The difference in the operation of the two varieties of this drug arises, according to Robiquet, from the circumstance of the *narcotin* being present in the Levant opium, and not in that produced in this part of Europe; and, so far as we know at present, the calming effects depend upon the salts of morphine.—*(Bulletins de la Societé Medicale d'Emulation, Mai* 1823.)

Successful Case of Inguinal Aneurism.—The operation of tying the external iliac artery for the cure of inguinal aneurism, was performed by Dr. J. C. Warren, in the Massachusetts General Hospital, on the 20th February last, with some interesting circumstances. The aneurismal tumor was large, and extended upward into the cavity of the abdomen.—When the muscles had been divided, and the abdominal cavity opened, the aneurism was seen rising so high as to conceal the iliac artery. From the anterior and inner part of the sac arose the epigastric, giving origin to the obturator artery, both of them greatly enlarged; the epigastric trunk being equal to the common size of the brachial. From the outer part of the sac rose the circumflexa ilii, also considerably enlarged. The epigastric interfered much with the necessary dissection of the great artery: and the iliac was exposed higher than usual, but the ligature was passed round it without difficulty. The event of this operation was favourable. The limb never lost its warmth, sensation, nor motion. The patient was restrained to his bed with difficulty till the ligature had separated; on the nineteenth day he was allowed to rise; on the following days walked about, and afterwards recruited rapidly.—*(New England Journal.)*

Discovery of Mineral Caoutchouc in New England, United States. — The following is Professor Silliman's account of this discovery, as given in his journal, vi. 370 :—" This remarkable mineral, hitherto nearly or quite confined to the Odin mine at Castleton, in Derbyshire, has been recently found at Southbury, twenty miles north-west of New-Haven. This region is a secondary trap basin, and although only six or eight miles in diameter, it presents all the characteristics of the great trap region of Connecticut and Massachusetts described by Mr. Hitchcock. Among other things, it contains slaty rocks with bituminous minerals; these have induced a search for coal which is now going on. We understand that they find bituminous slate or shale with small veins of coal. Specimens confirming this statement are now on the table, and they exhibit fibrous limestone, forming very distinct veins, or rather layers, running parallel with, and lying between, those of the slate. The fibres of the satin spar or fibrous lime stone are one inch or more in length; they are often cracked in the direction of the fibres, and between them there are veins occupied by the mineral caoutchouc. It has but little elasticity, it is soft, easily impressible by the nail, and compressible between the fingers like potassium, and can be formed into a perfect ball; its colour is jet black; some varieties of it are a little harder, and have a resinous and splendent lustre, and a flat conchoidal fracture; it burns with extreme brilliancy, with much black smoke, and an odour between that of a bitumen and that of an aromatic; during the combustion, drops of liquid fire fall in a stream, or in quick succession, and with a whizzing noise, exactly like the vegetable caoutchouc, and it melts precisely as that substance does. Rubbed on paper, it leaves a black streak, and acquires a high polish; it does not remove pencil marks from paper. The veins containing this mineral are about one quarter of an inch wide, and several inches long."

Longevity.—M. Neumark, of Ratisbon, has just published a curious Treatise on the means of attaining to an advanced age. The examples which he has quoted of persons who have lived to between ninety and a hundred years of age, are from twelve to twenty of every year in that interval. Those of centenaries, and up to a hundred and fifteen years, are more numerous ; but the number diminishes of those who have attained the age of from a hundred and sixteen to a hundred and twenty-three being not more than from four to nine. The examples of persons of a greater age than a hundred and twenty-three years, are naturally more rare. M. Neumark has quoted only one of two hundred, two of two hundred and ninety-seven, and one of three hundred and sixty. The individual who reached the last mentioned age was called Jean de Temporibns;* he was equerry to Charlemagne, and died in Germany in 1128. It is remarkable, that there are few people of rank and few physicians among the centenaries. Hippocrates and Dufournel (the latter of whom died at Paris, in 1805, aged a hundred and fifteen years,) are almost the only ones. Among monarchs, except Frederick the Second, who lived to the age of seventy-six years, few have passed seventy. Among three hundred Popes, only seven have reached the age of eighty years. Among philosophers who have become old, may be reckoned Kepler, Bacon, Newton, Euler, Kant, Fontenelle, &c. Among poets, Sophocles, Pindar, Young, Haller, Voltaire, Bodmer, Göthe, &c. The most numerous ex-

* M. Neumark will meet with many incredulous people who will not admit, without very positive proof, that any person ever attained to so extraordinary an age as this M. Jean de Temporibus.

amples of longevity have been furnished by Russia, Sweden, Norway, Denmark, Hungary, and Great Britain.

HOSPITAL REPORTS.

Guy's, Sept. 18.

The operation of tying the subclavian artery for aneurism of this vessel was performed by Mr. Key, in the space of twenty minutes, on George Vaughan, a stout athletic man, under forty years of age. The incision was made from the sternal end of the clavicle along the upper part and in the direction of this bone. The external jugular vein was unavoidably wounded and immediately taken up. The operation, nevertheless, presented fewer difficulties than we have been in the habit of witnessing in similar cases. Mr. Travers assisted Mr. K. and Mr. Tyrell was in attendance. The patient bore the operation remarkably well. The aneurismal sac was very large, extending into the right axilla. The arm, from the shoulder down to the hand, had an œdematous appearance; and, near the seat of the aneurism had very perceptibly changed to a livid colour.

COLES'S PATENT TRUSS.

In Number 30, we noticed the trusses invented by Mr. Coles of London Bridge; the following certificate from a surgeon of St. Bartholomew's Hospital, and the annexed affidavit tends strongly to confirm our favourable opinion of their utility.

"I hereby certify, that, Mr. Coles has perfectly succeeded in keeping up a very difficult and complicated rupture on which I operated some years since, in which case many of the best Truss-makers in London failed to afford any relief. When I placed the patient under his care I promised should he succeed io give him a certificate of my approbation, and in conformity with that I now state my firm conviction that his truss will be found more efficacious than any at present employed in similar cases. I have since tried his trusses in other cases, and have been much pleased with the ingenuity he has displayed in adapting his means to the circumstances of each case."

(Signed) HENRY EARLE,
George Street, Hanover Square.

London to wit. July 23, 1823.

Robert Hubbard, of the parish of St. Sepulchre, makath oath and saith, that he hath laboured under a very severe rupture upwards of thirty years, which has increased to an enormous size, and disabled him for many years past from following his avocation as a smith. This deponent likewise worked a journeyman for several eminent truss-makers in London, but he never saw a truss in his life which was calculated to keep up his rupture (in its present state) until Mr. Coles of London Bridge, applied one of his invention, whereby he, the said deponent, hath been rendered perfectly secure, and free from pain during eighteen months past, and that he is thereby enabled to work at his business, and walk four miles in one hour with ease.

(Signed) ROBERT HUBBARD.

Sworn at the Mansion House, 20th Aug. 1823, before me, W. HEYGATE, Mayor.

N. B. A profit of 100 per cent. is allowed to retail dealers.

LITERARY NOTICES.

Just published, by COX & SON, Borough,

Part II. of the SECOND VOLUME of MAJENDIE'S ELEMENTARY SUMMARY of PHYSIOLOGY. Translated by J. S. FORSYTH, Surgeon, &c.

A TREATISE on PRACTICAL CUPPING, comprising an Historical relation of the Operation, through ancient and modern times, with a copious and minute description of the several methods of performing it, &c. By SAMUEL BAYFIELD.

COX'S CATALOGUE of Modern Works in Anatomy, Physiology, Surgery, Medicine, Chemistry, Midwifery, the Veterinary Art, &c. To which is added, the Terms of Attendance at the Medical Schools, Lectures, Lecturers, Surgeons, Physicians to the various Establishments in the Metropolis, &c.

DIED.

September 15. — Frances, the wife of Mr. Hayes, Surgeon, Upper Charlotte Street, Fitzroy Square.

TO CORRESPONDENTS.

In consequence of the postage not being paid, several letters addressed to the Editors, within the last fortnight, have been refused.

The conclusion of Mr. Bullen's Case of Axillary Aneurism is postponed till next week.

London:

Printed by E. JUSTINS, 41, *Brick Lane, Spitalfields.*

Published by COX and SON, St. Thomas's Street and 39, High Street, Southwark. Sold also by Sherwood, Neely, and Jones, Paternoster Row; Simpkin and Marshall, Stationers' Court; John Cox, Berner's Street, Oxford Street; Callow and Wilson, Gerrard Street, Soho; W. Stewart, South Bridge Street, Edinburgh; J. Cameron, opposite the College, Glasgow; Hodges and M'Arthur, Dublin; &c. &c.

THE WEEKLY

MEDICO-CHIRURGICAL & PHILOSOPHICAL MAGAZINE.

No. XXXIV.] SATURDAY, SEPTEMBER 27, 1823. [*Price* 4*d.*

" FLORIFERIS, UT APES, IN SALTIBUS OMNIA LIBANT
OMNIA NOS, ITIDEM, DEPASCIMUR AUREA DICTA."

Some Account of the Life and Writings of the LATE WILLIAM HEY, Esq.

(Continued from page 131.)

Mr. Hey's recovery from lameness appearing remote and uncertain, he went to London in the spring of 1778, and consulted some of the most eminent surgeons in the metropolis. By their advice he proceeded to Bath, where he remained a considerable time; and, during his stay there, he commenced an acquaintance with Sir John Pringle, Bart. P.R.S. He likewise renewed his friendship with Mr. Arden, who had been a teacher at Heath academy, and was now engaged in giving a course of philosophical lectures at Bath. Mr. Hey, having offered to dissect an eye for Mr. Arden's lecture on optics, was requested to demonstrate the organ of vision to the audience, and with that request he readily complied. He went from Bath to Harwich for the benefit of sea-bathing, and returned to Leeds, after an absence of four months, in good health, but little improved in his power of using the injured limb. From this period to that of his death, he was never able to walk, except across a room of ordinary size, without the aid of a crutch.

In the year 1783, a philosophical and literary society was formed in Leeds, of which, as appears by a letter addressed to him in that capacity, Mr. Hey was the president.

Mr. Hey united the practice of midwifery with the two other departments of his profession. He was much employed as an accoucheur, was very successful in his practice, and introduced some considerable improvements in the management of women during parturition, and through the subsequent period of that confinement. He had bestowed much attention on the subject of puerperal convulsions. An essay on this subject was found among his papers, and he had formed an intention of giving it to the world; but, finding that he differed in opinion on some points from Dr. Denman, and the Doctor having said he would write against the paper if Mr. Hey published it, the publication was suspended from his unwillingness to engage in controversy. He purposed however to give the public a volume on midwifery, at some future time; but his numerous avocations prevented his fulfilling this design.

In the spring of 1810, Mr. Hey gave a course of anatomical demonstrations, consisting of twelve lectures, at the Leeds infirmary. The first eleven lectures were delivered on the body of a malefactor who had been executed at York for murder. He demonstrated the common integuments, the viscera of the thorax and abdomen, the brain, the muscles, the circulation of the blood, &c. introducing rather copious physiological observations, but treating more briefly of the diseases and injuries to which these several parts of the body are particularly exposed; thus rendering the subjects more instructive and interesting to a general audience.

A second course of anatomical lectures was delivered by Mr. Hey, in the year 1803, of which he gave the following account in a letter:— " A dreadful murder was committed

upon an old woman, near Wakefield, by two young men, who were both executed at York. The judge and counsel wished that one body might be dissected at Leeds. At this request I undertook the task; and with your brother's assistance,* have finished it. I shall be able to present forty guineas to the infirmary as the profits of it.† Ladies were admitted to the last lecture; which was upon the eye. About fifty attended; five guineas were collected from them. About one hundred tickets were distributed to gentlemen.

A third course of anatomical lectures was given by Mr. Hey in the year 1805, on a plan similar to the former. And a fourth and last course, in the year 1809. The subject dissected was a woman (Mary Bateman) of atrocious character, whose trial had excited great interest, and the attendance was more numerous than on any former occasion. By the first the infirmary gained £45 : 7s. by the last £80 : 14s.

Mr. Hey resigned his office of surgeon of the Leeds infirmary, Oct. 7, 1812, having first completed his seventy-sixth year. He had been surgeon of that institution somewhat more than forty-five years, during thirty-nine of which he was the senior surgeon. His son, the present Mr. Hey, was unanimously elected to the office vacated by the resignation of his father on the following day. This gentleman has been long treading in the footsteps of his revered predecessor; and, by his ability, assiduity, and integrity, supplies, as far as those qualities can supply, the loss which the public has sustained by the death of his father.

The annual general Board of the Trustees, to which the resignation was delivered, expressed their sense of the long and meritorious services of Mr. Hey by several resolutions, which do honour to their candonr, justice, and liberality of sentiment.

The long active and useful life of Mr. Hey was now approaching its termination. He had generally enjoyed good health and had not been afflicted with any serious indisposition till the year 1805, when on his return from London, during a visit to his brother in Hertingfordbury, he suffered from a severe disorder of the bowels which however was speedily subdued. After this, in 1808, during a second visit to the same relative, he was attacked by a painful disease, which reduced him to a state of great weakness, and many months elapsed before he was capable of resuming his professional labours. In Dec. 1817, he sustained another most alarming attack of a very painful and dangerous disease in his bowels. He suspected that ulceration had taken place in the colon, or its transverse arch. It pleased God, however, to restore him to his friends and to the public, after a confinement of more than three months; and, although his strength, in his own conception, was not remarkably impaired, nor his vigour abated, yet he never recovered perfectly from the injury inflicted on his constitution by that long and severe indisposition. He was, indeed, capable of going through his professional duties without much inconvenience, yet he was not without uneasy and uncomfortable feelings, occasionally in the abdomen. He would sometimes say, "I'm sure all is not right in my bowels:" and some months after his illness, alluding to the uneasiness of the lower part of his body, he said, "I have that about me which will carry me to my grave." His prognostic was too correctly verified in little more than a year afterwards. Few men, at the advanced age of 82, had suffered less from the pressure of age and its usual

* His son, the present Mr. Hey, who executed nearly the whole of the dissection, but gave none of the lectures.

† Forty-seven pounds, eleven shillings, and sixpence, were paid into the hands of the treasurer.

infirmities, either in their corporal or intellectual powers, than Mr. Hey. Hence he would often remark, that he was obliged to bring in the aid of reason to tell him he was an old man, since he experienced none of those symptoms of decrepitude, which, at the age of eighty years, in the emphatical language of Solomon, render the *grasshopper a burthen.* He would add, "I can now enjoy all the innocent pleasures of life as much as ever I could." His eye sight was remarkably good, so that he could read and write, in a good light without spectacles; and his hand-writing was firm and distinct, without any of those inequalities which denote a tremulous pen. His hearing was acute; and his vocal powers, although much diminished, were agreeable, and indicated that he once could have sung well. The imperfection of his memory was the change in his mental powers of which he chiefly complained: but the distinctness of his conceptions, the soundness of his judgment, his orderly and correct mode of thinking, and his facility of conveying his notions with perspicuity, copiousness, and fluency, do not appear to have suffered any remarkable diminution. He moved with much alertness and agility, and appeared to retain considerable power of exertion. Much of the freshness and vigour, which Mr. Hey retained in his declining years, and which rendered his old age pleasant and useful, may be ascribed, under the blessing of divine providence, to his early rising; his strict habits of temperance; the equanimity of his temper; and to that internal peace, composure, and serenity, which are the concomitants of a holy and devout life.

It only now remains to be mentioned that, after a short and not very painful illness, which commenced on March 9, 1819, Mr. Hey's useful life was closed on Tuesday, the 23rd of the same month.* On the following Saturday he was buried at St. Paul's Church, Leeds: his funeral was attended by a great number of his friends and fellow townsmen; and a funeral sermon was preached on the following day (Sunday) by his friend and highly respected pastor, the Rev. Miles Jackson, in the church of St. Paul, where Mr. Hey had been a constant attendant on divine worship, since its consecration in 1793. The congregation was unusually large, and a great part of them were in mourning. Mr. Jackson preached from the 5th chapter of Genesis, ver. 24; *Enoch walked with God, and he was not; for God took him.* A more appropriate text could hardly have been chosen for this solemn occasion. The pious preacher, after explaining to his audience, "what it is to walk with God," proceeded to show "the happy consequences of walking with him," delineating the character of Mr. Hey, as a bright illustration of his theme, with much feeling, judgment and fidelity.

(*To be continued.*)

* The particular circumstances of Mr. Hey's disease, and the subsequent examination of the body, will be found in the account of his professional writings, at the end of this Memoir.

OBSERVATIONS *on* FRACTURES *of the* NECK OF THE THIGH BONE. *By* SIR A. COOPER, BART, F.R.S. SURGEON TO THE KING, *&c. &c. &c.*

(Continued from page 134.)

The next point, observes Sir Astley, in which our author differs in opinion with me is, respecting the shortening of the limb in the fracture of the neck of the thigh-bone within the capsule, which he considers as being less than I have mentioned, I have stated it to be from one to two inches shorter than the other limb; and, from having since seen a case in which it was more than two inches, I extended it to two inches and a half. But instead of this statement being greater than it ought, I have now to add, that in Mr. Langstaff's collection

there is a preparation of the fractured neck of the thigh bone within the capsule, taken from a man named Campbell, aged 82, in whom Mr. Langstaff assured me the shortening was four inches; and, to convince me of this, he sent for the shoe which the man had worn after the accident, and which I measured: the heel of the shoe was two inches and a half in thickness, and he wore some pads in the shoe which raised his heel one inch and a half higher to bring it even with the other leg; therefore, if I were to alter the sentence, it would not be in the way our author wishes, but by making the utmost difference in length four inches. The usual state is, that the heel of the injured limb rests in the hollow between the malleolus internus and tendo achillis of the other leg. I know that there are examples in which the limb has been shortened only half an inch, but these are exceptions to a general rule, and they depend upon the mode in which the fracture has happened; for a fork is sometimes formed in the trochanter minor which receives the neck of the bone, and prevents its further descent.

'In the fracture of the neck of the thigh bone external to the capsule,—when the trochanter splits, and the neck of the thigh bone is received into its cancelli the degree of shortening of the limb is very slight, for it rarely reaches an inch, and is from half an inch to three quarters only. The reason for this is at once seen, by those who understand the anatomy of the part, and the nature of this fracture, for the head of the bone passes outwards more than it descends.

'Since the publication of the former edition of my work, I have inspected with Mr. Key, a fracture of this kind. The moment I had examined the patient, I pronounced the case to be a fracture external to the capsule, and was led to believe so from the limb being a little shortened; from the ecchymosis which attended it; from its distinct crepitus without any rotation; from the diminished motion of the upper part of the thigh; from the sunken state of the trochanter; and from the smallest motion giving great pain. This man died in a fortnight after his accident.

'When the body was placed upon the table, post mortem, for examination, all the limbs were rigid from the fixed contraction of the muscles, and, consequently, the thigh was drawn up to its greatest possible extent; when the limb was found to be not quite three quarters of an inch shorter than the other. The posterior part of the sheath of the vessels, were torn by the bone, which accounted for the ecchymosis. The neck of the thigh bone was forced into the cancelli of the trochanter major. Before writing this statement, I again asked Mr. Key the degree of shortening of the limb, and his answer was, "if you mention three quarters of an inch you will state rather more than its degree of retraction, even when all the muscles were contracted to their utmost degree of rigidity." I shall be happy to shew the parts which I removed from this case, with all the surrounding muscles, to any person who wishes to see them, as they at once explain the nature of the accident, and why the limb is so shortened.

'I am also attending a gentleman at the present moment, who has met with this injury, in whom the shortening of the limb does not exceed half an inch.

'In transverse fractures of the trochanter major I have seen the thigh bone very little shortened, and sometimes not at all; but there will be extensive exceptions to this rule, when the muscles are extensively torn.

In proof of this slight diminution in length, Sir Astley refers to the case of Mr. B. near Reading, as related in the work of dislocations and fractures by Mr. Harris, whom he at-

tended, in whom it will appear there was not the least shortening of the limb, but one portion of the trochanter fell at some distance behind the other. ' *The fact is*,' observes Sir A. ' *that these cases have been constantly mistaken for each other, and thus the symptoms of one species of injury have been given to the other.*' But when the trochanter is broken below the insertion of the principal rotatory muscles, and the surrounding muscles are much torn, there is a great shortening of the limb; and a very considerable degree of deformity ensues.

' From reading my account of apreparation, contained in Mr. Langstaff's excellent Museum, of fractures of the neck of the thigh bone within, and another external to the capsular ligament, it is said in the work before me, page 40.

" I was led to make a very particular " examination of this preparation, and the " inferences which I draw from such ex- " amination are very different to those at " which Sir Astley has arrived."

' The only conclusion I drew, adds Sir A. was, that the one unites by bone and the other by ligament.'

' He says,'—" in the first place, I ob- " served that the fractured surfaces with- " in the articulation were very accurately " opposed to each other, and consequent- " ly, that very little shortening could have " taken place."

To this Sir A. replies, ' that not one word was said respecting their being opposed to each other or not, and therefore no conclusion was drawn by me about it; and as to ascertaining the shortening of a limb, preserved in glass, and separated from the surrounding bones and muscles, no correct opinion could then be formed upon the subject.'

" Secondly:—I perceive that very firm " ligamente-cartilaginous union had taken " place."

' I would ask, is this the *ossific union* for which the author contends? The truth is, that I have seen a number of cases of fracture of the thigh bone within the capsule, but never less union, even by ligament, than in this preparation. Mr. Langstaff is a most liberal man, and will be happy to shew the preparation to any person anxious to see it.

" Thirdly:—It was evident that a con- " siderable portion of the reflected mem- " brane was not torn through."

' I have drawn no conclusion from the preparation in that respect, but I could wish Mr. Langstaff to be asked if any portion of the reflected membrane remains.

" Fourthly:—It appeared very clear, " that the fracture within the articulation, " would prevent the motion of the pelvis " from being communicated to the fracture " external to the capsule."

' I do not see this, observes Sir A.; the motion of the pelvis must be communicated to the insulated portion of bone through the medium of the capsule.

' Here then the conclusions are entirely the author's and not mine; for I drew no other than that the internal fracture did not unite, and that the external united; and with respect to the accurracy of description, I wish the reader to consult the preparation, as well as plate 11, which is a faithful representation of it.

' *Of the age in which this fracture occurs.*—The period of life at which fractures of the neck of the thigh bone within the capsular ligament, generally occur, is a most important consideration; and as it is one on which the practice of the Surgeon very much hinges, I shall take the liberty of making the following statement.

' I have now been 39 years at St Thomas' and Guy's Hospitals, and for THIRTY YEARS have had more than my share, and much more than I deserved, of the practice of London. We have 850 patients in our two Hospitals; and I believe that, in the two Hospitals, eight cases of fractures of the upper part of the thigh bone occur in each year; but in order to prevent my exceeding the average number, I will consider them only at

five per annum; thirty-nine, multiplied by five, produce one hundred and ninety-five; add to these one case only in each year in my private practice of thirty years, they will collectively amount to TWO HUNDRED AND TWENTY-FIVE CASES; now in that time, I have only known two cases of fracture of the neck of the thigh bone within the capsular ligament *occur under fifty-five years of age;* one was in a patient aged 38, who had an aneurism of the iliac artery; and the other has been kindly shewn to me by that excellent anatomist, Mr. Herbert Mayo. Our author states that he has examined, post mortem, three

"Fractures of the neck of the thigh "bone within the capsular ligament in "young people."

'I shall request permission to examine these rare and curious cases, which our author has no doubt preserved. The inspection of all the preparations alluded to in this work is at his service, but I confess that I fear some mistake may have arisen in our author's cases, from the following circumstances.

'There is in the Museum of the Royal College of Surgeons, a preparation bearing this inscription—

"Supposed fracture of the neck of the "os femoris within the capsular ligament "united in a girl five years old. By Mr. "Henry Earle, 1818."

Mr. Wilson, professor of anatomy and surgery to the Royal College of Surgeons, said of this, and another preparation in the Museum, in one of the lectures he delivered at the College, June 2, 1820, "I have examined very attentively these two preparations, and *cannot perceive one decisive proof, in either of the bones having been actually fractured.*" I shall draw no inference from this statement, but leave the reader to form his own opinion upon the subject, only observing that I trust *the three cases bear no resemblance to that in the College Museum.*

(To be continued.)

PHYSIOLOGY OF THE BRAIN,
By DR. GALL.

(Continued from page 118.)

Reasons which seem to prove that other nervous systems, entirely independent of the brain, are also capable of producing sensations and voluntary motions.

1. There exist animals in whom without shutting our eyes against the evidence, voluntary motions cannot be refused—the sense of feeling and tasting—although nothing can be discovered in them that can be compared with the brain; for, it is only owing to a distant resemblance, that some anatomists have called small brains, the scattered ganglions of this description. But these animals feel hunger, seize their prey, and eat; now since they have no brain, it becomes of necessity that sentiment in them must have its seat in other nerves.

2.—Every nerve destined to some particular function, has, as well as the brain, its particular origin, its particular apparatus for its reinforcement, its final expansion, and in itself forms one particular whole. Why should a similar nerve not likewise form a whole relative to its destination? Why should it not embrace a sphere of activity peculiar to itself? Some, in this case, have pretended to have seen a section of complete continuity presented by the spinal marrow, without, nevertheless, the parts which are below the lesion, being paralysed; this seems to be a proof in favour of my assertion. Dessault relates one of these facts, and I have read the other, I do not recollect where.

3.—Suppose the functions of the nerves of the organs of sense were only carried on in the brain, and that these nerves only receive external impressions, this is giving to an organ which has already functions to fulfil, another destination still, for which nature in vain would have formed a particular apparatus. In

this hypothesis, it had been sufficient if the external organs of sense, the eye, for example, had been placed in communication with the brain in the most simple manner. In this case, it would only be necessary to conduct the external impressions as far as the cerebral mass, in order to determine the latter to finish the operation whence results, sensations, taste, colours, sounds, &c.

4.—The perfect manner in which different nervous systems of the encephalon fulfil their functions, by no means depend upon the greater or less mass of the brain, but entirely upon their own organization more or less perfect. Do we not see certain insects gifted with feeling, hearing, an extremely acute taste, although their brain is not only very simple but very small? What indefatigable activity of the organs of the senses in these insects and in some fishes! The eye of the eagle, which has a small brain, but a large optic nerve, is it not more piercing than that of the dog whose brain is much larger, but whose optic nerve is smaller? Is the sense of smelling not keener in the dog than in the man, whose cerebral mass is at least ten times larger? Idiots, lunatics, &c. often enjoy the highest degree of voluntary motions and the functions of the nerves. Would it not be permitted to conclude from these facts, that the manner of acting of each sense, of each nerve destined for voluntary motion, is circumscribed in this nerve, in this sense, and that the brain takes no other part in their action than receiving those impressions and elaborating them with others more fine? Or, must it be inferred that, in the most perfect animals, certain parts of the brain are destined to receive the external impressions, and to react upon them; and other parts to more exalted functions.

5. It has been observed by some physiologists that when one sense is entirely destroyed, for example, in consequence of atrophia, that is, when not only the external organ has ceased to exist, but when all its nervous apparatus is annihilated; they have, I say, pretended to observe, that in this case, all the ideas dependent upon this sense are equally lost, and that their re-production is impossible. Might it not be concluded from this observation, that the impressions received by this sense are only preserved by itself, and that the recollection of them is only produced by itself alone?

The march of this phenomenon appears to justify my supposition. People who accidentally lose their sight, are at first inconsolable; the recollection of ideas which were transmitted to them is still recent, but, by degrees, they partly console themselves, without contradiction, because they become habituated to their misfortune; but perhaps also in a great measure because the organ of sight becoming weaker and weaker, the ideas which belong to it become weak in the same proportion. When at length the organ is entirely destroyed, the impressions depending upon it are equally annihilated, and even the remembrance of these impressions become impossible.*

Darwin cites the following examples:—"A man close upon sixty years of age, became deaf for nearly thirty years. He appeared to be very intelligent, and amused himself in reading and conversing in writing, or in making signs which represented letters with his fingers. I observed that he had forgotten the pronunciation of his language, so far that when he attempted to speak, he articulated no word distinctly. His parents nevertheless understood sometimes what he meant. He assured me that in his

* Sœmmering had already sent forth this opinion, in 1784, in the eleventh number of the *Hessische Beytræge zur Gelehrsamkeit und Kunst;* and he brought it forward again in (1800) his work entitled, Hirn- und pervenlehre. § 316.

dreams, he always imagined that people spoke to him by writing or signs, and never thought that he heard any one speak to him, whence it appears that with the perception of sounds, he had also lost the idea of those sounds, although the organs of speech had still preserved a feeble remnant of their ordinary mode of articulating."

"This observation may throw some light on the medical treatment of the deaf; as it may be ascertained by their dreams, whether the auditory nerve be paralysed, or whether the deafness may not proceed from some vice of the external organ."

"The most frequent causes of blindness are occasioned by vices of the external organ, as in the case of cataract, and of the obscuring of the cornea. I had an opportunity of conversing with two men who were blind for some years. One was affected with a well-marked gutta serena, and the other had lost all the substance of the eyes: they both told me that they did not remember having dreamt of visible objects, since the time they had totally lost their sight." I am acquainted with several similar facts myself.

Here then are fresh reasons why I have always maintained, in my public lessons, although these assertions are in opposition to the received ideas of philosophers, that each organ of sense has, at least in inferior animals, its functions to itself; that each of those organs has its proper faculty of receiving and of even perceiving the impressions, its own conscience and its own faculty of remembrance. This same opinion contended against by others, is also found in the works of Cabanis. The solution of this problem requires most exact and repeated experiments.

But how are we to explain the circumstance that in perfect animals when a nerve is strongly pressed, or compressed by means of a ligature, or completely divided, it loses all sensibility in that part of it which is separated from the brain? How does a pressure which acts upon the brain so suddenly interrupt the functions of all the senses?

Would the functions of the nervous systems in perfect animals require a simultaneous action, at least of those parts of the brain situated near its basis, in the same manner as the circulation of the blood requires the action of the heart; whilst, in imperfect animals, sensation, voluntary motion, and the action of the organs of the senses, take place without the concurrence of the brain, just as in these same animals, and in plants there exists a kind of circulation of the fluids without the concurrence of the heart?

Vegetables and zoophytes live without a nervous system, and are re-produced by slips. Other animals live with nerves but without brain. In general, in proportion as organism becomes more complicated, as the organs become more developed and fitter for the most extended functions, the simultaneous concourse of each organ becomes more important for the preservation of life. In proportion as the brain becomes more composed or complicated, it also more particularly influences the rest of the component parts of the body, until in the most perfect animals, every other organ lives under its influence.

As long as we are not able to fix the limits with any degree of exactitude between the phenomena of irritability and those of sensibility, the explanation of them will remain always more or less uncertain. When we see, on the one side, the greatest men consider the brain as the sole organ of sensation and will, in a word, of entire animal life, whilst others think themselves authorized to give to plants sensations, the sense of heat, cold, light, the passion of love, a will, a *sensorium commune*, the reminiscent faculty, dreams, the

idea, in short, as much of external objects as of their existence,* can we expect to conciliate such different opinions?

Happily, it is indifferent for the object I have proposed, whether these difficulties be resolved or not. I also abandon this subject and pass on to a more important question, and which does not present insolvable difficulties.

(*To be continued.*)

Observations on some Cases of rapid Developement of the Adventitious Tissues. By M. Andral, Juu. *&c.*†

Although the following cases are not of any interest in a therapeutical point of view, yet as tending to improve our knowledge of pathology, they are of very considerable importance. In general, the different adventitious tissues are slowly developed and characterized by symptoms of a chronic disease; occasionally, however, they spring up and increase with astonishing rapidity, and occasion an acute affection.

Case I.—*Cancer of the stomach terminating fatally thirty-seven days after the appearance of the first symptoms.*—A man, aged 40 years, was admitted into the hospital *La Charité*, in the month of January, 1822, labouring under acute rheumatism. Although he had been subject for a long period to rheumatic pains, he enjoyed an excellent state of health: his digestive functions had never been deranged. Being convalescent at the end of a fortnight, he procured food beyond the quantity that was allowed him, which occasioned considerable dyspepsia. The following days the gastric symptoms continued, and indicated the invasion of a more serious disease: he vomited the emollient drinks and broths which were given to him: he complained of a pain at the epigastrium, which was so much exasperated at intervals as to compel him to cry out. The remainder of the abdomen was soft and indolent: the pulse accelerated; the skin hot and dry; the tongue of a natural appearance; the features of the face were considerably altered. The epigastrium was covered with leeches, and emollient and anodyne fomentations were applied. The symptoms, however, continued; and on the third day from their invasion, the patient had already fallen into a state of marasmus: he then began to experience frequent acid eructations. Towards the twenty-fifth day he vomited, for the first time, a great quantity of dark-coloured matter, similar to soot: this vomiting recurred on the following days: the pain at the epigastrium became more and more violent: the marasmus had soon reached its last stage: the pale face assumed a cadaverous appearance: the pulse acquired more and more frequency, and death took place on the thirty-seventh day. Blisters, applied both to the epigastrium and the pelvic extremities, were productive of no more advantage than the local blood-letting practised at the commencement.

Dissection. — From the internal surface of the stomach near the pylorus, a fungiform tumour projected of the size of an egg, presenting all the characters of the encephaloid tissue, in a soft state: at its base, the tumour implicated the parietes of the stomach, which, to the extent of five or six fingers' breadth in every direction, had acquired six or seven times their ordinary thickness. In certain parts these parietes consisted only of a bluish white tissue, covered with an infinite number of small cavities filled with a fluid of gelatinous appearance—(scirrhous tissue in a crude and softened state.) In other places a dull white tissue was observable, furrowed by a multitude of reddish striæ, and excavated here and there by small sanguineous extrava-

---

* Darwin's Zoonomia, vol. I. sect. xiii.

† Archives Générales de Medicine, Juin 1823.

sations — (encephaloid tissue in a crude and softened state.)

The remainder of the mucous coat of the stomach was not sensibly altered. The other organs were healthy.

This case furnishes a very striking example of a cancer of the stomach, commencing, becoming developed, and terminating in death, in less than five weeks. A simple deviation in regimen appears to have been the occasional cause: the rapid increase of an adventitious tissue, the severity of the pain, the complete want of alimentation, sufficiently explain the intensity of the symptoms and the rapidity of the death. It is worthy of remark, that in this case no symptoms of typhoid fever were present. The tongue, in particular, was scarcely changed from its natural condition: this depended on the mucous membrane of the stomach being affected secondarily, the cancer having been primitively developed in the subjacent cellular tissue.

Case II.—*Cancerous tumour of the liver arising and terminating fatally in three weeks.*—A foreign merchant, about forty-five years of age, had several times been the subject of intermittent fever: he had enjoyed, however, from the age of forty, a perfect state of health. In the course of the month of April, 1820, he felt some slight pains immediately beneath the cartilaginous edge of the right false ribs: towards the end of this month symptoms of jaundice showed themselves: at this time he was admitted in *La Charité*. When we saw him, he had no fever: his appetite was very good, and the digestive functions appeared unaffected; except that, as in the majority of cases of jaundice, the stools were colourless, and the urine of an orange red: the right hypochondrium was soft and indolent. He was ordered whey, with acetate of potass, and calomel and soap in the form of a pill. On the 2nd of May, the pain in the right hypochondrium recurred, and continued on the following days: fever supervened, and the hypochondrium became tense, as if occupied by a tumefied liver. Leeches were applied to the hypochondrium.

On the 9th of May, we began to feel, immediately beneath the edge of the ribs, to the right of the epigastrium, a globular, immoveable tumour, which was very painful when slightly pressed upon. He was ordered a narcotic cataplasm.

From the 9th to the 15th, this tumour had acquired a considerable developement: it became evident to the sight; and by the side of it several other small, unequal, and painful tumours soon manifested themselves.

From the 15th to the 20th, these tumours extended behind the cartilages of the ribs, which they forcibly raised up; at the same time, the patient began to vomit his drinks, three or four hours after having taken them: the fever was continued, with a violent exacerbation every evening, during which the pains in the hypochondrium became lancinating: the disease now proceeded with a terrifying rapidity: on the 20th he had reached the last stage of marasmus and debility: on the 21st he dyed.

Dissection.—The liver, which was large, passed beyond the edge of the ribs to the extent of four fingers' breadth. On its convex surface several tumours, formed by a mixture of encephaloid, scirrhous, and tuberculous tissues, still in a state of crudity, projected. These tumours extended somewhat deeply into the interior of the viscus: between them, the tissue of the liver was, however, perfectly sound.

Some tumours of the same nature surrounded and compressed the ductus hepaticus and ductus choledochus, as well as the pyloric extremity of the stomach.

It is, doubtless, possible that the tumours of the liver and of the gastro-hepatic omentum might have

existed for many years. Observation proves, that similar tumours, so long as they are small, not numerous, and in a crude state, are not incompatible with the healthy state; but what we wish at present especially to notice, is the extreme rapidity of their increase, and the promptly fatal accidents resulting from them. The jaundice, in all probability, began to manifest itself at the period when the cancerous tumours, in becoming developed, compressed the biliary ducts; the vomitings, which supervened in the latter periods, are also naturally explained by the multiplication of these tumours around the pylorus.

(*To be continued.*)

Case of Aneurism of the Aorta, in which the Application of Cold proved very beneficial. By Joseph Ward, Esq. Member of the Royal College of Surgeons, and Apothecary to the London Hospital.

Thomes Burgon, ætatis fifty-six, gardener, first applied for relief April 9, 1822; he had been labouring under all the usual symptoms of a thoracic aneurism, and at the time of his application was found to have one of large magnitude on the right side of the cavity of the chest, rather below the clavical; it protruded very much above the surface, and to all appearance was in a very advanced stage; his breathing was short, and he complained of excessive pain in the right arm, which increased on his allowing it to hang by his side. He was put under a palliative treatment for these symptoms during two months, during all which time the tumour remained stationary, when he went into the country.

In a short time afterwards, the tumour was observed to increase in size, and the symptoms became more urgent; a dark spot appeared in its centre, around the edges of which a very small quantity of arterial blood oozed out. Attention was paid to his bowels, and vinegar and water were ordered to be applied assiduously, with a view to keep the part constantly cold; this gave him very severe pains in the head, which were not relieved by the usual remedies, and annoyed him much. After the cold application had been continued some days, the tumour was observed to lessen, the dark central spot diminished in size, and at last a complete cicatrix formed, the tumour totally disappearing; he was still, however, troubled with pain in the chest and shortness of breathing, and the pain in his right arm continued: his situation, notwithstanding, was very bearable, compared with what it had been.

This state continued for about three months, when he became worse; the tumour was observed to increase very gradually, and all the symptoms became daily more urgent. He was treated as before, but without relief; and on the 24th July, 1823, he died from external hæmorrhage, the tumour not having reached near the size it had on the former occasion.

On examination after death, nothing very particular presented itself. A large aneurism existed at the arch of the aorta, without ossific deposits; the other large vessels were quite healthy, and the coagula in the aneurismal sac were observed to be rather more firm than usual.

Mr. Bullen's Case of Ligature of the Subclavian Artery.

(Concluded from page 124.)

Nothing of importance occurred after this time till the 19th, sixteen days after the operation. At four o'clock this morning, I was sent for to the patient, on account of hæmorrhage from the wound, which had by this time nearly healed, except where the ends of the ligatures hang out. When I arrived, he had lost about three or four ounces of blood. I took off the dressings, and found the bleeding had stopped. The ligature on the main artery remained firmly attached. Thinking the hæmorrhage

might have come from one end of the jugular vein, which had been divided and tied during the operation, and from the upper end of which the ligature had not yet separated, I applied a compress of lint along that vessel. At eight o'clock, Dr. Whiting saw him with me. There had been no return of hæmorrhage. On gently pulling the ligature, however, with which the subclavian artery had been tied, a slight oozing of blood, clearly arterial, came along it. A thick compress of lint was applied, and adhesive plaster tightly stretched over it. At seven o'clock in the evening, I was again sent for on account of bleeding. When I arrived, he lay almost covered with blood. I took off the compress, and found the hæmorrhage had stopped before my arrival. On gently moving him, to take away the bloody linen, he fainted. Another graduated compress, much larger than the former, was applied. Directly after this bleeding, the aneurismal tumour was found to have considerably subsided. The hæmorrhage returned at one, and again at six the following morning; but as he had not lost more than ℥ss. of blood at each of these bleedings, I did not take off the compress. There was no more bleeding till one o'clock the next morning; and it stopped of itself as before.

On the 22d, as there was considerable fœtor from the dressings, the upper part of the compress was removed and renewed.—23d. The wound was dressed; no hæmorrhage occurred when the compress was removed; and, on pressure, a discharge of healthy pus appeared. —24th. Dressed as yesterday. The ligature, for several days, had been twisted by means of a piece of wood put through its end, and fastened down with adhesive plaster: this morning, it lay loose in the wound. On examining the ligature, it was found that the knot, upon the subclavian artery, had given way, on account of its not having been tied double. A reference to the account of the period of the operation when the ligature was tied will explain this circumstance. The silk was twisted to the very extremity.

After the second bleeding, considerable constitutional irritation took place. The pulse was seldom lower than 112, and usually between 120 and 130, very small and feeble; sometimes it was scarcely to be felt. A troublesome cough was also present, which was attended by a mucous expectoration, dry tongue, frequent hiccup, and a hot and dry skin. The aneurismal tumour, on the 21st, began gradually to increase in size, without pulsation; and on the 29th, it became so evident, that it was proposed to puncture it next morning. In the evening, however, a violent cough came on, which continued incessantly throughout the night. On visiting him in the morning, I found he had brought up, by coughing, six or eight ounces of bloody pus, very high coloured, and the tumour had diminished during the night about one-half; but as it evidently yet contained a considerable quantity of fluid, and as he was exhausted by incessantly coughing, it was determined to evacuate its contents by a small opening, at the most depending part. About five ounces of the same kind of matter as that which was coughed up escaped by this outlet, which greatly relieved him. A cavity could now be distinctly felt between the first and the second ribs, at their sternal ends, through which the fluid had passed into the lungs; and as there was now a free communication with the lungs, the air passed freely into the sac whenever he coughed, distended it, and sometimes the air escaped by the external opening. A compress and straps of adhesive plaster were placed over the opening which formed the communication between the lungs and the sac, with a view of preventing the matter from passing into the lungs. A plug of lint was put into the outer opening, and occasionally withdrawn

to let out the matter. This plan had the effect of preventing the cough for several hours together. He continued, however, to cough a good deal, and he expectorated pus, at intervals, for several days, though of a much lighter colour. A free allowance of wine and nutriment were allowed him; and he continued gradually to recover from his greatly emaciated and weakened state.

The discharge from the outer opening and through the lungs gradually lessened, and he assumed a healthy appearance. At the end of three weeks, nothing was discharged from the outer opening, which was, therefore, allowed to close. The cough, after expectorating for near a week a thin glairy mucus, gradually left him.

After escaping from this dangerous situation, and when the wound had nearly healed, an erysipelatous inflammation appeared on the left side of it, which was confined to the inner triangular flap; and, notwithstanding the means which were used, partial suppurations continued to form in different parts of the flap till the middle of June.

On the morning of the 17th of June, seventy-five days after the operation, there were two small openings, discharging a bloody pus, one about an inch above the other, communicating by a sinus underneath the integuments, the original wound having completely cicatrized. Supposing there was not a free exit for the matter, the space between the openings was divided by a blunt-pointed bistoury. No matter followed; and very little bleeding took place from the edges, which had a glassy and spongy appearance. A piece of lint was inserted between the edges, and lightly covered with adhesive plaster. In the evening of this day, while stooping to pull off his stockings, a large stream of blood suddenly gushed from the wound, which he with difficulty checked by pressure with his hand. I saw him a few minutes after; the hæmorrhage had then stopped, and he very soon fainted. The wound was dressed with a thick graduated compress and long straps of adhesive plaster, as after the former bleedings. On the third day after this, the dressings were taken off; there had been no return of hæmorrhage; more healthy pus was discharged than for several weeks previously; and the erysipelatous appearance had subsided.

On the 4th day, the skin of the right side, in the situation of the aneurismal tumour, became inflamed; the integuments very tumid and tense. He had passed a very restless night, owing to pain in this situation, and to a troublesome cough, which greatly aggravated the pain, and which was attended with a mucous expectoration; his breathing became hurried, and the pulse very quick and feeble. His tongue was rather white and dry. A cold evaporating lotion was ordered to the inflamed part, with directions for leeches to be applied to it, if the pain should continue. In the evening, it took on the erysipelatous character; but the pain was quite gone. The swelling continued to subside, and after three or four days it had disappeared. The wound went on healing, and ninety-two days after the operation, was quite well.

The posterior cervical artery, which was turned on one side during the operation by a blunt hook, is now felt greatly enlarged and tortuous, and running superficially across the cicatrix. His health is fully re-established; the hand, however, is sometimes slightly benumbed, but he has had no pain in it ever since the artery was tied. He can use both arms freely.

Lynn Regis, Norfolk, 26th July, 1823.

Medicine *and* Surgery *among the Aborigines of New Holland.*

"They have few diseases, but such as arise among those near towns from intemperance and neglect of themselves: like the white inhabitants,

they are subject to bowel complaints, and they consider the gum of the mimosa a sovereign remedy in these complaints. I have not been able to ascertain whether they obtained the knowledge of any medicinal virtues this gum possesses from the colonists, or the colonists from them; but they both make use of it, and consider it of great service in dysentery. The root of the fern they consider diuretic, and they use it in gonorrhœa and other affections of the urinary organs. This I believe is the extent of their medical skill. Their native doctors never venture further. The chief part of their art is confined to charms, which consist in repeating some set words over the patient; but of the meaning of them, or their supposed efficacy, I could gain no other information than that they deemed it right always to undergo such a ceremony when they are very ill. The head man of the tribe is very generally doctor. They are fond of applying to the European medical men for advice, but they can seldom be got to take medicine. A glass of Bengal rum, or in the colonial phraseology, "bull," is their great panacea; and to it they resort whenever they can obtain it. In this they implicitly follow the practice of their civilized brethren, among whom Bengal rum forms the only enjoyment when well, and the only medicine when ill."

"The surgery of the native tribes is equally simple with their medical practice, but more efficacious. When bit by snakes, which is with them a frequent occurrence, they make a ligature above the wound, scarify it with a shell or any sharp instrument they possess, and then suck it for a considerable time. The women exercise this branch of the art, and when they are at hand, the colonists, who meet with accidents of this kind, always apply to them; and, if this simple operation be performed soon after the injury is inflicted, the deleterious effects of the poison are generally prevented."—*(Med. Phy. Journal.)*

MELANGE.

Urinary Calculus, weighing ten Ounces, expelled by a natural Process.—M. Gerrard, of Beauvais, has lately published a case under this title. A man, sixty years of age, and of good constitution, had been attacked, when about five-and-twenty with a feeling of heat in the urinary passages, and an increased diuresis, which was unaccompanied by pain. These circumstances continued for six years, and then gave place to dysuria, with acute pain and irregular fever: the urine at this time flowed *guttatim*, and was mixed with blood and pus. The patient remained for nearly twenty-two years subject to these attacks, but following his usual occupations during the intervals, till 1810, when retention of urine came on, with violent fever and delirium. The surgeon, who was now called, attempted in vain to introduce a sound, while the efforts to evacuate contents of the bladder became so violent as to produce an inguinal hernia. An abscess formed in the perineum, which was opened on the left side of the raphe, and a great quantity of pus evacuated. As the urine now flowed by this opening, fresh attempts were made to introduce a sound into the bladder, but without success, an invisible resistance being experienced at the neck. Several smaller abscesses subsequently formed, and gave rise to urinary fistulæ. After about eight months' suffering, the patient recovered so far as to resume his usual occupations, although walking was rendered somewhat difficult by a tumor, which, lodging partly in the left groin *(aine)*, impeded the movement of the thigh. In July, 1822, an enormous abscess was formed, which involved the scrotum and penis: this

was treated with emollient applications, and suppuration was established. In consequence, however, of the violence of the inflammation, or perhaps from the urine coming in contact with the parts, some gangrenous points formed, and, when these fell off, (July 26,) a large round body was evacuated, by an effort compared by the patient to labour. This body was pear-shaped, with a gradulated surface, and weighed ten ounces: at present it weighs only seven and a half. Its circumference is seven and a quarter inches at the middle; six and a half at the larger end, and four and a half at the smaller; it is three and a half inches in length. The patient gradually recovered, suffering no inconvenience except from a fistulous opening.

M. M. Gaultier De Claubry and Desruelles, who report upon this case, are of opinion that the calculus was extra-vesical, and probably was situated in the scrotum or perineum.—(*Bulletins de la Societè Medicale d' Emulation de Paris*, Mai 1823.)

Excision of Encysted Tumors.—Mr. M'Ghie suggests an improvement in the excision of those species of encysted tumors which have been denominated the Melicerous and Atheromatous.

"It is well known that the extirpation of the former, especially, of these kinds of swellings, is often rendered extremely tedious and difficult from the tenuity of the cyst, and the fluidity of its contents. Notwithstanding the utmost caution and adroitness on the part of the surgeon, the sac will at times be opened in dissecting it from the contiguous parts; and, by its collapsing, the completing of the operation is much embarrassed, if not altogether prevented.

"To obviate so unpleasant an occurrence, and also to enable the operators to remove the whole of the disease with the greater certainty and expedition, I would advise, whenever there is the least reason to suppose that the foregoing difficulties will be encountered, that the sac should be opened with an abscess lancet; its contents pressed out; and, to clear it completely of these, some tepid water is to be thrown into it with a large syringe. A thin mixture of sulphate of lime (plaster of Paris) and water is then to be injected into the cyst, until it is distended to its former bulk; and, as this injection hardens immediately, it will occasion no delay in the operation: on the contrary, from the contents of the tumor being now a calcareous concrete substance, the detachment of its cyst will be found a very easy matter. The amount of pain therefore, which would have been suffered in the removing of it, will be lessened; and, what is of still greater importance, there can be no risk of leaving any portion of it behind, to become the germ of a troublesome, and perhaps very serious, disease.

"The syringe which I would recommend to be used ought to be capable of containing half a pint, and have a long conical mouthpiece, with which the operator is to be careful that he fills the aperture into the cyst, whilst he is throwing in the mixture of the sulphate of lime, so that none of the injection shall escape into the cellular substance external to the sac; and he is not to withdraw the syringe until this hardens which it will do in the course of a few seconds. It is almost unnecessary to add, that the injection should not be prepared until it is just going to be used; for it becomes solid in a very short time, from the strong affinity which the sulphate of lime has for water."—(*Edinburgh Med. and Surg. Journal*, July.)

CAS RARES.

Extraordinary Lactation.—In the year 1810, a poor woman, of the name of Charles, was delivered of male twins, but being of a weakly constitution, and unable to suckle them both, she applied one of them

to the breast of her *grandmother*, aged 65, and in the 29th year of her widowhood. It was "great cry and little wool" with the poor boy for the first few days, but afterwards the milk came copiously and kindly for twenty-two months, and this boy became the strongest of the two.*

Cabrol relates the curious, but dreadful effects of cantharides, taken as an aphrodiscal. A man swallowed *two drachms* of this active medicine, and afterwards effected *eighty-seven coitis in una nocte*. (L' insensé approacha sa femme quatre vingt seht fois pendant la nuit) besides several seminal emissions. (Doct. des Sciences Medicales, à l' article, *cas rares.)*

We purpose to select a few *rare cases* of more modern date than those which the same source afford. The following, for instance, of only a few days occurrence, we present to our readers as a specimen.

Extraordinary occurrence.—The following singular circumstance has happened to a young woman in Maryport, which it is supposed originated in having drunk unwholesome water in the hayfield about six weeks since. She was soon after seized with a pain in her stomach attended with a sensation as if something was creeping within it; but having eaten some salt provision, it probably became an antidote, for on Saturday last she threw up a large dead worm, apparently of the snake species, (this we presume to be a new species of worm, the vermis *snakiformis* of Maryport) upwards of half a yard long and thick in proportion, spotted or rather striped all over. Having discharged the animal, she was immediately relieved from pain and is now perfectly restored to health. (*Carlisle Jour. Septr.*)

Again.—"An *Extraordinary and successful operation* was performed on the 23d ult. (*Aug.*) by Mr. Phillip Lewis, Veterinary Surgeon, &c. on a bullock belonging to Mr. Webb, of Mornington. The animal being taken with a *stoppage* and symptoms of the *twist*, Mr. Lewis took out the entrails, and discovering the cause of the complaint to be a substance about the size of an egg, he cut into the intestine and extracted it; and the animal is now as well as ever."

---

* This certainly would have been encouragement to Johanna Southcote, as in all probability young Shiloa would not have required a wet nurse.

The above is not on the authority of Doctor Richard "of London," but on that of Dr. Montegre, who has published the circumstance in the Gazette de Santé.

OBITUARY.

Died, at his country seat, near Cirencester, on Tuesday last, Mathew Baillie, M. D.

This eminent physician was the nephew of the late Dr. William Hunter, and of Mr. John Hunter. In the schools of these celebrated anatomists he had acquired a knowledge of human anatomy equal to that of any of his contemporaries; and his lucid and accurate demonstrations gave him peculiar celebrity as a teacher of that important science. After the death of the late Dr. Warren, he so rapidly and deservedly rose in the public estimation and confidence as to be unable to persevere with his lectures; and he continued for between thirty and forty years to hold a pre-eminent place in the foremost ranks of the profession.

Dr. Baillie had, in a great measure, retired from general practice for some years, and except in the case of very old connections, confined himself to consultations. He was a great favourite with the old King, who, frequently, during the intervals of his malady, expressed himself towards the late Doctor very affectionately. In order that he might be near his Majesty, this learned and most amiable physician occupied a house in the neighbourhood of Windsor. Dr. Baillie was married to Miss Sophia Denman, (daughter of the late Dr. Denman, and sister to Mr. Denman, the present Common Serjeant of the City) by whom he has one son and one daughter living to join her in lamenting their mutual loss. Miss Johanna Baillie, whose poems and series of plays on the passions obtained her so much celebrity, was his sister.

Sept. 23, this day se'nnight, at Bawtry, Mr. Markham Nicholson, in his 61st year. He was in his usual state of health till attacked with apoplexy four days preceding his decease. On examination after death, a considerable quantity of water was found within the head, and a mass of coagulated blood near the centre of the brain.

London:

Printed by E. JUSTINS, 41, *Brick Lane, Spitalfields.*

Published by COX and SON, St. Thomas's Street, and 39, High Street, Southwark. Sold also by Sherwood, Neely, and Jones, Paternoster Row; Simpkin and Marshall, Stationers' Court; John Cox, Berner's Street, Oxford Street; Callow and Wilson, Gerrard Street, Soho; W. Stewart, South Bridge Street, Edinburgh; J. Cameron, opposite the College, Glasgow; Hodges and M'Arthur, Dublin; &c. &c.

THE WEEKLY

MEDICO-CHIRURGICAL & PHILOSOPHICAL MAGAZINE.

No. XXXV.] SATURDAY, OCTOBER 4, 1823. [*Price* 4*d*.

" FLORIFERIS, UT APES, IN SALTIBUS OMNIA LIBANT
OMNIA NOS, ITIDEM, DEPASCIMUR AUREA DICTA."

An Account of Linnæus, by the celebrated Mineralogist E. C. SCHULTZ, *at Hamburgh.*

(From Stoever's Linnæus.)

WHAT occasioned my first literary correspondence and acquaintance with Linnæus, was a prince and a book. I published in 1769 a description of several curiosities of nature, art and antiquity, which has deservedly attracted the notice and attention of the curious in Moyer's Cabinet of Natural History at Hamburgh.* This cabinet having been destined for sale, and my description having been sent to several amateurs in foreign countries, it so happened that it fell into the hands of the Queen of Sweden, the sister of Frederick the Great, whose love of natural history was so conspicuous. Another copy of my work being at the same time transmitted to the celebrated Count Scheffer, governor to the late king, he could not help communicating it likewise to his favourite Linnæus.

Gustavus the Great, then Prince Royal, went afterwards to France, accompanied by his governor. The latter introduced me to this prince during his stay at Hamburgh, which lasted from the 23d to the 30th of December of the same year. Several precious stones, very scarce, and partly unknown, amongst others the *Asterias*, whose wonderful appearance I had first discovered shortly before in 1770, and which I illus-

* The above work appeared at Hamburgh in two volumes, octavo. The reader will not be displeased with the following brief account of the author himself.—Mr. Ernest Christopher Schultz was born in 1740, at Koenigsberg, in Prussia. He was at the University with Baron Jacobi, the present Prussian minister at the court of London. His parents wanted him to study divinity, but, like Linnæus, he preferred natural botany. In the year 1764 his considerable cabinet of natural treasures, especially a fine collection of ambers, and a considerable library of natural history, were destroyed at Koenigsberg by the dreadful conflagration which ravaged that city. He was so affected at this loss, that he resolved to travel. He afterwards fixed upon Hamburgh as the most eligible spot, for his general residence, and began to collect another cabinet, and to enrich it, travelled through the principal countries of Europe. He made several valuable discoveries, especially that of the rainbow-coloured agate and the Asterias of Pliny, which the curious had considered as a non-entity. He composed a treatise upon the Asterias, which was read with universal applause at the meeting of the Academy of Sciences at St. Petersburgh: and Frederick the Great of Prussia was so pleased with it that he sent Mr. Schultz a most flattering note in his own handwriting in which he thanked him for his discovery. The present King of Prussia presented him also with two gold medals, which he received from the hands of Count Von Herzberg. He first gave the best description of the gem called oculus mundi. It was doubtful whether that gem was the work of nature or of art: but Mr. Schultz proved it to be a natural production, by a treatise which was read in the Royal Academy of Sciences at Paris in 1776. Prince Frederick of Brunswick also complimented him in a letter on the revival of the Asterias of Pliny. While he was at Paris he bought of an ignorant person a crystal of Madagascar, for the sum of three Louis d'ors, which represented in its internal structure the perfect form of a net. The great mineralogist, Delisle, soon afterwards offered him 4000 livres for it, on the part of the Queen of France. As a naturalist, his knowledge was of the first rate, and his merits are acknowledged by the first literati of the age.

trated afterwards, besides many other valuable productions of nature which I had the honour on that occasion to show and to explain to the prince, especially the Opal of Nonnius, and that most rare one which Cronstedt, the Swedish mineralogist, describes to be of a brown and of a blood red colour, made his highness desire me to give Linnæus some account of the above interesting and curious opal.

I obeyed the prince's command with the greatest pleasure, gave Linnæus the desired account, and sent him at the same time some curious gems. He thanked me for my present in a most obliging letter, which I received June 24th, 1771. Long had I felt a wish of getting acquainted with that great man. My mineralogical tour to the forest *Harzwald*, through Saxony, Holland, France, &c. precluded me, however, from gratifying that wish. In 1775 I went to Copenhagen, where I had formerly passed a few weeks with great utility and delight. On the 20th of September I took my departure from that capital in company of a Swedish literatus, with whom I made acquaintance at the house of the Swedish ambassador; repaired to Lund, where I saw the botanical garden, and every thing that was remarkable, and reached Stockholm at the end of the same month. During my abode in Sweden, I visited the villa of Toreso, belonging to Count Scheffer, who received me with unbounded kindness and cordiality. The late king to whom I had been presented at Hamburgh, while prince royal, had ascended the throne, and was just then on a tour through the Swedish provinces. "I had the pleasure," said Count Scheffer, "to introduce you to his majesty as prince royal, and you shall not go hence before I shall also have introduced you to him as king. Waiting his return, you would do well to take a trip to Upsal, on a visit to Linnæus." The Count spoke in terms of the greatest veneration of Linnæus, and I had in other respects long ago resolved in my mind to have an interview with him. I set out accordingly early in the morning on the 24th of October from Stockholm, and reached Upsal on the same evening. I had hardly time to rest myself for a few minutes at my lodgings, before the younger Linnæus surprised me with a visit, and invited me to his father's house the next day.

Sir Charles received me with that openess, and that pleasing affability of temper, for which he was so strongly remarkable. Although he had then attained the 67th year of his age, yet he still appeared quite brisk and lively: his stature was short, but his body of a strong and robust make.—"Well," said he to me in Latin, after we had exchanged the usual compliments, "What new natural curiosity do you bring me?" "Alas," replied I, "how difficult, how bordering upon impossibility would it be, to bring any thing new to a Linnæus!" As it happened, I had taken with me and collected some natural curiosities by the way. I shewed him, therefore, among others, a small crab, which, from the characteristic description of it in his system of nature, appeared to be the Cancer Hirtellus. Linnæus recognized it to be the same, and asked me if there was none of a larger size? he owned, that having never seen them any larger, he had assigned to those little hairy crabs, the Latin diminutive hirtelli. I then shewed another specimen of the same kind which had not the supposed hair on the back of the shell. He was surprised at seeing on the surface of the back the natural figure of an human face. Cautious and provident as he was in all his researches, he now began to think that art had lent her aid in this singular and striking phenomenon. To remove all doubts, I took the other crab still covered with the supposed hair, divested it of

that cover which nature has laid on the backs of all those species, and shewed him on every one the appearance of an human face. His attention was still more engrossed, at my making him perceive through the glass, that those little filaments, which sometimes appear on the back of those crabs, and resemble an hairy cover, are not hair, if viewed with the naked eye, but a sort of coraline moss, which sometimes settles upon those crabs, in the same manner as there are among some sorts of the small shell fish certain species encrusted with a madreporous or milleporous sediment.

Linnæus convinced himself in the same manner that the number of prickles on the back of the Cancer Hirtellus, which he had fixed at ten (thorace hirto, utrinque quinque dentato) was not a solid description: but that most of them bore only eight, some nine, and the smallest number only ten. I afterwards gave a separate description and representation of this species.

The elder Linnæus gave no lectures at that time, but I wished at least for an opportunity to hear his son. The latter just read a lecture in the forenoon upon botany. The time having escaped with our conversation upon Zoology, I left his father with the promise according to his request, to come and see him every day during my stay at Upsal.

The younger Linnæus was somewhat taller than his father, but at that time was corpulent. His delivery was fluent, but mixed with a certain cold indifference. It appeared as if his exertions were rather a strict performance of the duties of his station, than a real zeal flowing from a natural fondness of his science: his father, on the contrary, betrayed, even in his conversation upon subjects relative to natural history, an enthusiastic predilection and a most scrutinizing zeal.

The lecture which the younger Linnæus gave, was upon the classes of the plants, with five stamina; many living ones were exposed in garden pots in the lecture room, then taken out of the mould, divided into small branches, and distributed to those of the audience who were the most attentive.

When the lecture hour had expired, the younger Linnæus shewed me the Casuar from Ceylon, of which the late queen dowager of Sweden had made a present to his father. This large bird was uncommonly tame, moved about with a great strut, and eyed attentively every body that would notice him. He had in his company two English bantams, with their bantlings. The gigantic Casuar shewed himself very complaisant and attentive to his little companions, and looked down on the ground at every strut he made, as if he was apprehensive lest he should crush any of his chicking companions.

At another visit to Linnæus I shewed him a very rare shell, both halves of which were remarkable for their cameræ. As it seemed new and unknown to him, I gave him a specimen, to which I added a still greater, namely, a well-dried original of the Asteria columnaris, so remarkable among the petrifactions. He refused at first to accept of these small presents, unless I would take some others in return from his own collections, and proposed to me to take a ride with him to his villa at Hammarby.

This excursion, however, did not take place. At another visit our conversation turned upon mineralogy. I shewed him a rough and perfectly crystalized ruby which I had received at Copenhagen of Mr. Gappel, to whom Dr. Koenig had sent it from Ceylon: its uncommon sexagenous blunted columnar form quite struck him, having never before seen any thing of the kind. I collected afterwards many more species of this class, some of which were still

greater curiosities. I stood indebted to a fatal catastrophe for the acquisition of these treasures: namely, to the ship of Admiral Sir Hyde Parker, which was wrecked, during the last American war, on the coast of the Dutch settlements, and the cargo of which was sold at Amsterdam.

I presented to the sight of Linnæus a curiosity still newer and more interesting to him. This was the opal called oculus mundi. He freely owned that he had never seen it, and borrowed the account which is inserted in his system from Wallerius's mineralogy. In my opinion, I was the only one at that time, who was positively acquainted with the nature of this stone. "I envy you," said the venerable Linnæus, "the possession of a gem, which has hitherto exclusively been preserved in the British Museum;* and I have not now the least doubt respecting the genuine reality of this extraordinary opal of which you have given me an account some years ago." Every shadow of doubt was effectually removed when I shewed him the very opal itself, which is the mother of the most beautiful and rarest oculus mundi. His joy and satisfaction was also farther increased, when I laid before him the rainbow coloured agate which I also discovered, and the brilliancy of whose colours surpasses the mort beautiful gem of the east. Enraptured with admiration at the beauty of this stone, Linnæus began in a strain of enthusiastic language to expatiate on the magnificence and grandeur of the Creator. "Theologia naturalis," exclaimed he, "est vera Philosophia: or nature best proclaims a God," &c.

Time finally bereft me of the exquisite delight which I should have experienced, had I been at liberty to enjoy any longer the conversation of this great man. I returned to Stockholm, where Count Scheffer presented me to the late king. His majesty was graciously pleased to discourse with me upon the oculus mundi which I had discovered, and even to make experiments on the change of colours.

When I went next day to take leave of Count Scheffer, he presented me, in his majesty's name, with two gold medals. "Linnæus," added he, "complains of you to me, for having made too short a stay at Upsal. The opinion which he entertains of you may be collected from the answer which he returned to the enquiries of my friends at Stockholm.*

My return by the Baltic to Courland was far from being a pleasant one, as the winter season had then begun to set in. But the remembrance of the happy hours which I had passed in Sweden made me forget all the inconvenience of my voyage—and this remembrance will always continue precious and dear to my reflection.

* Sir Hans Sloane gave £500. for two of these gems, which are not larger than a pea.

Some Account of the Life and Writings of the

LATE WILLIAM HEY, Esq.

(Concluded from page 147.)

Having taken a cursory glance at the professional life of William Hey, Esq. as far as our limits could well permit us, we must now beg leave to refer the reader, for the general characteristics that adorned the career of this eminently useful and good man, to the work before us, which will amply recompense the time that may be bestowed upon the perusal of it. Previous, however, to entering upon the account of his professional writ-

* These answers were written on two cards: one of them contained these words:

Dominum E. C. Schultz.—*Ex professo Curiosum et Mineralogum pulcherrime disserentem de lapidibus, cum oblectamento exaudivimus.*—Carl Von Linne.

The second card bore:—*Quo, quantoque ardore servet in scientiam Mineralogiam clarissimus E. C. Schultz: non latebit quenquam, qui brevi tempore ejus conversatione utitur.*—Carl Von Linne.

ings, we shall sum up his public and private life in the following very appropriate tributary words which appeared, about the time of his death, in one of the provincial papers.

"In domestic life he was kind, tender and affectionate;—as a magistrate* just, legal and conscientious. In him virtue and religion found a father and protector;—vice, a stern but merciful judge and monitor. In every measure where the true interests of his country were to be promoted;—where the ignorant were to be instructed;—where the sufferings of the poor were to be alleviated;—where the fetters of slavery were to be loosed:—where the benign precepts of christianity were to be diffused; there was he to be found, the powerful advocate and determined champion of that religion, upon which, as one of its brightest ornaments, his own example reflected additional lustre."

HIS PROFESSIONAL WRITINGS; WITH REMARKS.

In the year 1766 a paper, written by Mr. Hey, was published in the London Medical Observations and Enquiries, containing an extract of a letter to Dr. William Hunter, with an account of an extra-uterine fœtus. This publication contains a narrative of the circumstances attending the pregnancy of the patient, from the period of two months after she had conceived, to the time of her death, which occurred in about ten months afterwards. A detailed and interesting account of the dissection is also subjoined.

In the year 1768, "an account of rupture of the bladder from a suppression *(retention)* of urine in a pregnant woman" was published in the fourth volume of the same periodical work, with the appearances found on dissection.

The rupture of the bladder is a fatal accident, and the edges of the lacerated part are commonly found in a sphacelated state, when it is not the effect of sudden external violence. Although a knowledge of the nature of the injury sustained by this viscus, does not conduct to a successful mode of treating it, yet, it is of importance to be acquainted with its diagnostic symptoms.

In the fifth volume of the same publication there is a paper by Mr. Hey, containing "an account of the effects of electricity in the amaurosis, with a sequel to the paper." We have here a narrative of seven cases of this species of blindness, which occurred in Mr. Hey's practice, within the years 1766 and 1771, in all of which electricity was employed. Three of the patients recovered their sight; two of them were greatly benefited; one patient received little advantage, and the other died from disease in the brain and the superior cervical vertebræ, of which the amaurosis was only a symptom.

Since the publication of Mr. Hey's paper, electricity has been employed in the treatment of this malady, both in this and in foreign countries with various success; yet the result, upon the whole, is unfavourable to the efficacy of this agent in the gutta serena. The amaurosis, it is well known, may be derived from many different causes; some of which render the disease absolutely incurable by art. In many of the cases which admit of cure, or, at the least, of great alleviation, those remedies which act upon the organs of digestion and the intestinal tube are often found highly advantageous; in others, mercury, freely administered, has proved conspicuously beneficial; and in several instances tonic medi-

* In the 1786, Mr. Hey was elected an Alderman of the Borough of Leeds, and in the following year he was appointed to the office of Mayor of Leeds. "He became a good lawyer, and has been often known to correct the errors of council, when, with great confidence, they were laying down the law to the magistrates at the sessions."

cines have been successful. The amaurosis which is the consequence of an injury inflicted on the supra-orbital branch of the fifth pair of nerves, had been removed by the application of local irritants before the introduction of electricity into medical fracture; and it appears from the experience of Mr. Hey and others, that this agent may be safely, and sometimes successfully applied in such cases.*

In the 6th volume of the Medical Observations and Enquiries, there is a letter from Mr. Hey to Dr. William Hunter, on the good effects of small quantities of milk given in four cases of weakness and irritability of the stomach. A paper on the same subject by Dr. William Hunter, precedes Mr. Hey's letter, who acknowledges having adopted the mode of treatment in consequence of a hint formerly received from Dr. William Hunter.

Mr. Hey published, in the year 1779, "Observations on the Blood," a small tract in 8vo. containing eighty-one pages. In this production the author dissents from opinions maintained by the late Mr. Hewson, in his experimental enquiry, wherein he undertakes to prove that "inflammation, instead of increasing the disposition of the blood to coagulate, really lessens it; and instead of thickening the blood, really thins it; at least, that part which forms the crust; viz. the coagulable lymph. Mr. Hey likewise controverts the experiments made, and the inferences deduced, by Mr. Hewson on the state of the blood drawn from the blood-vessels of dying animals. It seems that Mr. Hewson, having remarked, that the blood taken from a person labouring under an inflammatory disease was longer in coagulating than blood drawn in a healthy state, concluded, that inflammation has the power of attenuating the coagulable lymph; so that the density, or consistence of the coagulating part is lessened by the disease; hence he assumed that inflammation produced a change in the properties of the coagulable lymph.

Mr. Hey contends, that the greater comparative slowness with which blood coagulates, is no proof of a change in the density of the coagulating part; that the greater or less consistence of this given portion of blood is to be estimated by the quantity of coagulable lymph contained in it; and that the blood of patients disordered by inflammation does commonly contain a larger proportion of coagulable lymph, *cæteris paribus*, than healthy blood. Hence the propriety of attending more to the comparative quantity and firmness of the crassamentum, than to the appearance or absence of a buffy coat, or size, in determining on the expediency of repeating the bleeding. The buff upon the upper part of the coagulated mass consists of coagulable lymph and serum, below which the red globules had subsided before the coagulation was effected. The appearing of a sizy crust proves that the blood remained longer fluid than usual, but determines nothing concerning the consistency of the blood; this quality being always connected with the comparative quantity and tenacity of the coagulable lymph.

Mr. Hey proceeds in the latter part of his tract, to offer some remarks on a query proposed in the 2nd volume of the Medical Transactions by the late Mr. Heberden.

* Two memoirs by Mr. Mauduyt may be consulted on this subject; the former in the second, the latter is in the fourth volume of "Histoire de la Société Royale de Medecine." A valuable chapter on the amaurosis is contained in a treatise on the principal diseases of the eyes, by Professor Scarpa, 2nd edition, 1818, translated by Mr. Briggs, surgeon to the dispensary, and assistant surgeon of the Lock Hospital; and Mr. Travers has more recently published a very excellent work on the diseases of the eye, in which the subject of amaurosis is treated with much science and ability.

The query is this: "Is the sizy covering, which is often seen upon the blood, of any use in directing the method of cure?"—To which "I beg leave," says Mr. Hey, "to give the following general answer: that, although a mere appearance of size on the surface of the crassamentum gives no certain direction respecting the method of cure, yet the quantity of size found in, or upon, the crassamentum, which must be judged of by the thickness and density of the sizy covering and the tenacity of the crassamentum conjointly, affords, when compared with the other symptoms of the disease, some useful information." The work is written concisely, yet with much perspicuity, and evinces a clear and distinct conception of the subjects on which it treats. Many useful facts and important practical observations occur in different parts of this production, which tend to the improvement of this department of pathology.

(*To be continued.*)

DR. GALL

ON THE FUNCTIONS OF THE BRAIN

Can the brain, exclusively, be considered as the organ of the intellectual faculties and moral qualities?

In order to enter more profoundly into this question, I shall commence by proving to what parts it is impossible to attribute intellectual faculties and moral qualities. This deduction will lead me to establish that the brain, in fact, must, exclusively, be acknowledged as the organ of the intellectual faculties and moral qualities.

NEGATIVE PROOFS.

The material condition of the intellectual faculties and moral qualities can be looked for in no other part of the body than the brain.

If for a moment we except the different nervous systems, there exists no part of the animal body which is organised so as to be thought fit to fulfil superior functions, or to produce instinct, industrious aptitudes, passions, faculties, will, reason. Who will ever attribute similar functions to the bones, ligaments, membranes, muscles, to the cellular texture, vessels, glands, &c.?

According to the received opinion one might be induced to consider the heart as the seat of the moral qualities, or of the vices, such, for example, as mildness, generosity, courage, cruelty, &c. But the moment the heart is known to be only a muscle constructed with admirable art, composed of cavities, valves, and an infinity of small muscles and tendons crossing each other in a thousand different ways—from the moment we are not ignorant that the heart is the principal agent in the circulation of the blood, this opinion falls to the ground of its own accord.*

Some physiologists have wished to attribute the honour of the superior functions to the diaphragm; but the diaphragm in like manner is only a tendinous muscle whose functions are affected by the chest and abdomen.

A poetical physiologist dreamt that the liver was composed of two substances similar to those of which the brain is composed. In consequence of this idea, he found the liver, in a state of health, very fit to be the organ of reason, and in a state of

---

* Richerand considers courage as the moral function of the heart. "The following is the manner he expresses himself on this subject: "the heart is larger, stronger, and more robust in courageous animals, than in the weak and timid species."..... It will probably be objected to, that certain animals, such as the turkey cock, the ostrich, are less courageous than the smallest bird of prey; that the ox is less so than the lion, and several other carniverous beasts. But here the absolute size of the heart is not in question, but its relative bulk. Now although the heart of a hawk is absolutely smaller than that of a turkey cock, it is much more proportioned to the other parts of the animal.--(*Nouveaux Elements de Physiologie, 7 edit. t. i. p. 322.*)

disease, that of folly. The liver has manifestly for object the secretion of bile; and it will be difficult to imagine this fluid to be the intermedium between the soul and body.

Several of the qualities attributed to the viscera are not manifested for a length of time after their developement. The liver, the glands, &c. are developed in young animals and in children, long before the qualities or faculties which are made to depend upon them are manifested, and these qualities and faculties do not necessarily undergo modifications when the liver, glands, &c. are irritated, inflamed, ulcerated, &c.

Several passages in the Bible seem to suppose that the loins and the heart are the seat and the source of the most intimate thoughts and secret designs. But, *God trieth the reins*, may very well alone signify that his omniscience penetrates even into the interior of man. Besides, we must just look as little to the writings of the dissertations upon the functions of the parts of the human body, as to the movements of the celestial bodies. As the loins are charged with the secretion of urine, it would be an ignoble idea to look there for the origin of the passions and conceptions.

Certain mutilations, for example, those of the sexual organs, have a manifest influence over the moral and intellectual character of the animal or man thus mutilated. Could not this authorise one to look for the cause of certain qualities in those parts? By no means; for the loss of the sexual parts carries with it, not the loss, but only the modification of the qualities in question. In another place, I shall prove that the lesions or destructions of the sexual parts, bring on modifications, not only of the whole constitution, but of the brain; they must necessarily then modify the manner in which the brain fulfils its functions.

Could the fluids be the material condition for the exercise of the faculties of the soul? But a fluid in which every thing is mixed together, in which the proportions of the constituent parts are every minute changing, can it be the seat of determinate and fixed functions? In short, the acephali *cretins* and idiots from birth, have the same fluids and solids equally with well constituted persons, without any of the qualities being remarked in them which one might be tempted to attribute either to the blood or to the viscera.

Comparative anatomy contradicts all these reveries. The pig, the bull, &c. have the parts in question nearly conformed in the same manner as man; without having all the qualities of the latter. Several of the viscera in question are larger in animals than in man, and, nevertheless, how much inferior they are to us, even in those very qualities which we participate with them? The wolf, the tiger, the sheep, the hare, and the castor, have the same viscera; their inclinations nevertheless, their appetites, their industrious aptitudes are not only different but contradictory. Or will it be maintained that the heart in the tiger is the organ of cruelty, and in the sheep of mildness? Several animals have a very large liver, although we observe none of those qualities in them which might induce us to yield to the liver. Others want certain viscera; and we remark in them qualities which we attribute to such viscera. Insects, for instance, have neither liver nor bile; and nevertheless they are very irrascible. Birds have no diaphragm. Besides, every viscus carries the character of the functions with which it is charged, otherwise, every thing is arranged in it to effect a secretion or to fulfil an object which has nothing in common with the intellectual or moral functions. None of the parts then which we have mentioned can be the organ of the intellectual faculties or moral qualities.

Observations *on* Fractures *of the* Neck of the Thigh Bone. *By* Sir A. Cooper, Bart, F.R.S. Surgeon to the King, *&c. &c &c.*

(Continued from page 150.)

'But I now come,' continues Sir A. 'to a part of the work in which I have to complain of misrepresentation; and while I feel assured that this must have been unintentional, I am very glad that the matter is here so much condensed, that it is very easy for me to make a reply. After giving an account of the fractures external to the capsule, so far as I have observed them, I have stated that they occur under thirty years of age; but I also expressly say, "*that they occur in advanced age*," and give three cases which shew that they do:—yet our author speaking of these cases, chooses to say,

"And this is all the evidence adduced "to prove that fractures external to the "capsule occur in early life,—that they "are the result of great violence,—that "they are not shortened,—and that they "are capable of ossific union."—p. 56.

'To the first I have to state, that I have mentioned that fractures external to the ligament *occur under fifty years of age;* a great number of these cases which have fallen under my notice, have occurred under that period, and, therefore, a surgeon called to the bedside of a patient who has an injury to the upper part of the thigh bone, if he finds the age of the patient to be under fiifty years, will, with a rare exception, be correct in his judgment, if he concludes it to be either a fracture just external to the ligament, or one through the trochanter major. But I also mention that *both fractures occur in age*, and therefore no conclusion can be drawn between the two, in advanced age, but by the most careful examination. The three cases which I have given, clearly shew this. If I had said these fractures external to the capsule only occur under fifty years of age, our author would have had some foundation for his remarks.

'I have stated that fractures directly external to the capsule arise from greater violence than fracture within the capsule; for my experience has taught me, that a very slight accident generally occasions these fractures within the capsule, and a violent blow or fall, the other: the first is an accident upon which the fall often succeeds, the other is generally the consequence of that fall; many of those within the capsule which I have witnessed, were produced by the person's slipping from the curb-stone to the road-way,* not that I mean to deny, that a fall will, and does occasionally, produce a fracture within the capsule, or that in a very old person, a fracture may occasionally happen in any part of a bone, from, comparatively, a slight cause to that which produces it in the young.

'It is also said, that "I have observed they are *not* shortened;" whereas, I have expressly said, "*the limb is shortened*, but not to the same extent as in the internal fracture, for the difference in the length of the limbs rarely amounts to an inch; its extent depending upon the obliquity of the fracture, and upon the degree of laceration of the surrounding parts admitting of a greater or less retraction of the muscles."

'It is further said,

"That I give no other evidence of the "fractures external to the capsule, and "those through the trochanter being ca-"pable of ossific union."

'How could such a statement be made, when I have given three plates of the ossific union of the cervix external to the capsule, and one of the trochanter united.—*(Vide Book on Dislocations and Fractures, 1st. and 2nd. Edit.)*

'I have said, "That if the broken extremities of the bone, in any part

* Slipping from the curb-stone on the road-way produces a violence in a perpendicular direction, falling against the edge of the curb-stone produces often the fracture external to the capsule.

of the body, be kept asunder, ossific union is prevented;" but, as our author says, "that the correctness of "this statement is very question-"able;" to shew how questionable it is, I hope to be able to give in this appendix, or, at all events, shall do so in the third edition of my work, five different examples of non-union of the bone, produced by this cause. But I well knew that two or three inches of the os femoris and os humeri may be removed and the bone unite, if its broken ends are suffered to be drawn together by the action of the muscles.

In confirmation of the correctness of these remarks Sir Astley has inserted a communication on the subject, from Mr. Benjamin Bell, of Edinburgh.* Sir A. also alludes to a cast of a leg, sent to him, in which the space between the broken end of tibia and fibula is nearly filled up by bone; and expresses his intention, in the forthcoming third edition of his work, to shew the result of some experiments, which will explain this case.

'The next subject, continues Sir Astley, in the work I am analysing, upon which the author raises a doubt is, whether there be an increased quantity of synovia secreted into a joint which is subject to an irritation from a fracture extending into it; he, however, at once removes the difficulty himself, by giving a dissection of his own in the case of Spilling.

"On puncturing the capsule, about *an* "*ounce of bloody synovia* escaped; and the "introduction of the finger readily de-"tected a fracture of the bone."

With equal reason he doubts if this fluid would separate the broken bones, and he illustrates this by a supposed experiment with an inflated and distended bag; which experiment cannot illustrate the morbid extension gradually produced in the ligament by the continued pressure of accumulated synovia. Every one in practice must have seen the knee under extension of its ligaments, from an increased secretion of synovia, with its bones so loose and separated that it will not support the weight of the body.

'I am candidly asked to state, if the force which produces these fractures of the upper part of the thigh bone ever occasions dislocations? To this I answer, that very little force is often sufficient to produce dislocation. It is the direction in which the force is applied, and the muscles being unprepared for resistence, and not the violence of the accident, which is the cause of dislocation. A case will be seen in my work, of dislocation of the thigh-bone upon the pubes, produced by a person walking across a paved yard, where one of the flag stones had been taken up. I have also known a dislocation of the thigh-bone upward, produced by the foot being caught in the doubling of a carpet whilst the person was crossing the room. With respect to other joints,—who has not seen a dislocation of the os humeri produced by very slights accidents? and a few days ago I was consulted for a dislocation of the astragulus, with fracture of the fibula, produced by treading on a cable, and the accident was considered by the patient, in the first instance, only as a sprain.

(*To be continued.*)

Remarks by HENRY EARLE, Esq. *&c. on Sir Astley Cooper's Reply to his critical Observations on Fracture of the Neck of the Femur, &c. &c.*

Mr. Earle, we perceive, has addressed a letter to the Editors of the Medical and Physical Journal and Medical Repository, begging them to correct an inaccuracy which he lately published in a critical work on Fractures of the Neck of the Femur.

* A respectable and intelligent individual, grandson of Mr. Benjamin Bell, who was a most useful man to the profession by his publications, and son of Mr. Geo. Bell, also a most able surgeon, of Edinburgh. Mr. Bell is likely to be a worthy successor of such a father.

This early correction of a manifest error is no less honorable to the character of the worthy and able assistant surgeon of St. Bartholomew's, than it must prove grateful to the feelings of his generous opponent of Guy's Hospital.

"At page 41," observes Mr. Earle, "in alluding to a preparation, contained in Mr. Langstaff's museum, of a case of double fracture within and external to the capsule, I have stated that '*a firm ligamento-cartilaginous union had taken place*,' Mr. Langstaff has obligingly corrected the error into which I had fallen, and, with his usual liberality, has afforded me another opportunity of examining the preparation alluded to, which I find to be VERY ACCURATELY DESCRIBED by Sir Astley Cooper."

Mr. Earle accounts for the misrepresentation in the first place from not having had the benefit of Mr. Langstaff's attendance, on a former occasion, to explain the individual specimens, to which with the short notes he then took, he ascribes the mistake relative to the preparation in question. This declaration he considers due to Sir Astley. At the same time he observes, that the absence of union in this case does not in the slightest degree invalidate the reasoning which he has employed, and that he (Mr. Earle) still considers that the fracture within the articulation would prevent the motions of the pelvis from being communicated to the fracture external to the capsule; and, consequently, that no comparison can be drawn between the two fractures, on the supposition that the one within the articulation would be liable to participate in every motion of the trunk and pelvis, while that external to the capsule, from the very circumstance of the double fracture, would be in a great measure secured from any such interruptions to bony union.

In addition to these, Mr. Earle thinks it right further to observe, "that the central portion between the two fractures, being nearly insulated, would be placed under much less favorable circumstances for union than when connected with the shaft of the bone."

These two facts, Mr. E. is of opinion are sufficient to account for the want of those reparative effects which commonly take place in simple cases of fracture within the articulation.

Since the above were penned Mr. E. says he has had an opportunity of reading Sir Astley Cooper's reply to his observations in an appendix to his third edition; and as that work, he observes, contains many heavy charges against him, it is incumbent upon him to repel them. Whether these said charges be repelled or not, is for the reader to draw his own inference. Whatever may have been the style and manner of the attack, Mr. E. appears, and very laudably, to have adopted his adversary's tactics in conducting the repulse, or, without meaning any offence, we would rather call it the retreat. The first—led on with all the ardour and impetuosity of a young warrior on his first campaign—the second—managed with all the conviction, candour and coolness of an experienced general, who has learnt to avail himself of former errors, and to turn them to the best advantage whenever the adverse moment may again be at hand.—We shall now lay before our readers, VERBATIM, Mr. Earle's repulse, without further comment.

"In the first place," says he, "I am charged with an attack on the honour and credit of Guy's Hospital. To this I offer my most unqualified disavowal of any such intention, or of the slightest inimical feeling towards any individual connected with it. No impartial person can possibly draw such an inference from any part of my work; unless, indeed, Sir A. C. has so entirely identified himself with that noble institution, that to differ from him in opinion can be

construed into an attack upon the whole school. No petty motives of rivalship influenced me in taking the steps which I have followed, but a conscientious feeling that an advocate for the possibility of union within the articulation was imperiously called for. If I had wished to have contrasted one school with the other, I might have strengthened my cause by stating, that the doctrines which I have inculcated are entertained by most of the able associates with whom I am connected, and are taught by the eloquent and highly gifted Professor who has so long been an ornament and support to St. Bartholomew's."

"I am next charged with misleading the rising generation with incorrect surgical principles; and Sir Astley is led to exclaim, "good God! is this written by an English surgeon?" It is even so, and by one who hopes to have some claim to that honorable title, should he succeed in restraining the rough and useless freedom of examination which he has too often witnessed in these cases, and in establishing in its room a train of more rational and less injurious diagnostic symptoms, sufficiently clear to direct the judgment of any one competent to the practice of his profession."

"To the charge of misrepresentation, at page 22, I distinctly plead not guilty, and feel confident of a verdict in my favour. Sir A. C. at page 146 of his large work, lays down certain rules respecting fractures external to the capsule, to which he admits that there are exceptions: then follow three cases in proof of the positions laid down, but, unfortunately, so far from illustrating, they are all in direct opposition to them. When this inconsistency is pointed out, Sir A. C. charges me with misrepresentation, and wishes the cases in question to be considered as illustrative of the exceptions to his rules; and so, indeed, in the next edition, with some trifling alterations and additions, they may be made to appear; but as they at present stand in the first and second editions, there cannot be any reasonable doubt of their bearing the interpretation which has been put upon them by many other persons as well as myself. If Sir A. C. really intended them as exceptions to his general rules, he should have stated so more clearly and intelligibly; but surely no critic can be fairly chargeable with misrepresentation in consequence of the author's want of sufficient perspicuity. With much greater justice I might complain of the allusion which has been made to the case of fractured olecranon, at page 15, as unfairly and partially quoted. In relating that case I openly and candidly avowed the mistake under which I laboured, with a view to caution others from falling into the same error, by following too implicitly the doctrines of the schools; and I have clearly proved that in the case in question not one of the symptoms existed, which are described by Sir A. C. and other systematic writers. It is not my intention at present to answer the various parts of this appendix in detail: but having rebutted the several charges which have been brought against me, I shall beg leave to notice a few passages in the appendix which might lead to a misunderstanding of my work. With respect to the case of Spilling, mentioned at page 14, I had nothing to do with the treatment of him, and believe that but little was done to restore the limb, because it was evident that the patient was dyiug of a disease in the liver."

'The preparation in the College museum, alluded to at page 21, I value so little, that I have not even mentioned it in my work. It was taken from a patient who was burnt to death; and I could learn nothing respecting it, but that she was supposed to have dislocated her thigh,

which was never properly restored. With respect to the case of shortening to the extent of four inches, mentioned at page 16, I have only to observe, that the question at issue is respecting the degree of shortening immediately consecutive to the accident. I have myself expressly stated, at page 43, " that in old neglected cases where no union has taken place, there will often be very considerable shortening in consequence of the absorption of the neck within the articulation:" precisely such is the case in the preparation in question; but surely this cannot be gravely brought forward in proof of the degree of shortening immediately after the accident. Sir Astley has employed the man's high-heeled shoe as a guage; but this is very fallacious, as the direction of the whole thigh would be altered, and the knee would be slightly bent, which would increase the apparent degree of shortening, even supposing the actual shortening not to exceed two inches and a half; not to mention that some allowance should he made for the thickness of the other shoe."

At page 7, Sir Astley has said that no argument can ever settle the question of the possibility of union, which can only be decided by observation. This is undoubtedly true; but it is equally so that *the question never can be decided in the affirmative by following the doctrines which he has inculcated, as the practice Sir A. recommends and follows renders union by bone a moral impossibility.* By reasoning, however, I hope that I have shown that there is no actual law in the animal economy prohibiting such union. By reasoning, I have endeavoured to explain the causes which have hitherto contributed to interrupt bony union; and by reasoning, I hope to induce my professional brethren not to abandon these cases as hopeless."

" I am well aware that my work is deficient in positive evidence, but I trust that I have assigned satisfactory reasons for the results having been hitherto so generally unsuccessful. If there had existed more positive evidence on this disputed question, the doubts at present entertained could not possibly have been maintained by any person, and my humble pen would not have been required in support of the possibility of union. The present inquiry will, I hope, lead to the solution of the difficulties which have hitherto involved this subject, and to the elucidation of truth—the great end and object of my inquiry. When, however, I find it acknowledged by Sir A. C. himself, that perpendicular fractures through the head and neck of the femur, through the patella, and through the olecranon, will unite by bone, I cannot admit that a different law influences transverse fractures of the same parts. The difference consists in the more perfect adaptation of the broken parts, and the more permanent state of rest, and not in any deviation from the laws of the animal economy. Let us then direct our whole attention to this one object, and by improved means endeavour to accomplish this desirable end. Instead of indulging in angry discussions, and anxiously seeking for additional proofs of non-union, let us steadily exert ourselves in endeavouring to prevent deformity and lameness, and to restore our patients to the perfect use of their limbs. By having pursued this plan, I am happy to say that I can produce several living instances of complete success; and should my own life be sufficiently prolonged, and the prejudices of the public against anatomical investigations not prohibit, I shall hope some day to produce unequivocal proofs in support of the possibility of bony union."

" I shall conclude for the present these observations, with reiterated assurances that I entered on this inquiry as a public duty with much

repugnance, and that I feel truly sorry that what I have stated should have created any angry feelings in Sir Astley's mind. In animadverting on that gentleman's work, I have only touched on those parts which were of importance to the subject under discussion, and no unfriendly or personal feeling for a moment influenced my mind.

I sincerely feel and hope always to feel sentiments of respect and regard to that gentleman, and of cordial good will towards my professional brethren, who are connected with the excellent school of which he is so distinguished a member.

George Street, September, 1823.

ST. THOMAS'S HOSPITAL.

SIR ASTLEY COOPER'S INTRODUCTORY LECTURE.

Oct. 1. 8 *o'clock, p. m.*—Few minutes after the stated hour, Sir Astley's entrance into the lecture room was greeted amid the genuine plaudits of grateful and heartfelt congratulation and esteem of as crowded an assemblage as we ever before witnessed, of both old and young, "from the stripling to the grey-beard."—Every seat, spot and *vacuum* was completely filled up and crowded to excess. The *pythagorians*, or those who arrived too late to get a seat, filled the portico and *stood* it manfully to the last.

Sir Astley's overture consisted in drawing a comparative view of the physician and the surgeon—that the attention of the latter was more particularly drawn to accidents and performing certain operations according to the principles laid down by surgeons; for whose guide there were three sources of observation—viz. Examination, experiments on living animals, and inspection of the bodies of those who have died of disease.

After fully expatiating on these different subjects, Sir Astley remonstrated against hypothetical discussions—these he termed, and very justly so, an ignis fatuus which could not be too much discouraged,—whilst accurate investigation and analysis would serve as a polar star to guide their votaries to fame, fortune, and independence.

The practice of the profession, he observed, required certain qualities, viz. the application of remedies and the performing of certain operations —in the latter, he remarked, that a man's hand may frequently spoil his head—by this was meant, the mechanical preceding the mental evolutions. The mind, he said, should invariably direct the hand. Another circumstance that ought to be an inseparable concomitant with all good surgeons, was gentleness in the manner of performing their duty. Nothing, in fact, redounded so much to the credit of the profession, who frequently were not considered as possessing the nicest feelings, as sensibility and firmness—in short, *the suaviter in modo and fortiter in re*, could never be better exemplified than in a surgeon who might be said to know his duty. There was, he observed, a readiness and an aptitude which, with some, might be said to be born with them, but where these were deficient, by diligence and attention, which overcome a number of difficulties, the end might be attained; and that every man, thereby, had the means in his own possession, of rendering himself eminently distinguished or superlatively ignorant according as he felt disposed to employ or pervert them.

Sir Astley once again reverted to that surgical axiom which advises every one in the profession "never to do to his patient what, under similar circumstances, he would not submit to himself."

Regarding the education of a surgeon, Sir. A. remarked that there could be no surgeons without anatomists. It was not enough to be acquainted with coarse component parts

of the human frame, every surgeon should be a minute anatomist, and this minuteness should be acquired not by the lump, but by piecemeal, and afterwards by connecting the whole. It was these half anatomists that were perpetually making blunders and bringing obloquy on the profession. The pupils of the present day were better anatomists than the teachers of forty years ago. Sir A. illustrated, by quoting a number of instances within his own recollection, where the want of a knowledge of anatomy had proved fatal to the character of many an individual, who until his anatomical knowledge was called upon, had passed for a very intelligent man in his profession, but the moment the veil was lifted, sunk into that obscurity and disrepute they so well deserved. The man, said he, who professes surgery without a knowledge of anatomy is "an impostor." In allusion to physiology, he observed, that no surgeon can become scientific without a knowledge of it. Here Sir Astley spoke in the warmest terms of admiration of the immortal John Hunter, and, in glowing language, held him up as a model to youth—he was, he said, a man of talent, and his genius was his industry—his museum was the admiration of the world—men of science came far and near to see it—this was only one monument of his fame—his principles of surgery were not only his own and most lasting monument (as they were still practised at the present day) but his country's.

Speaking of the practice of medicine, Sir A. observed that a physician is not a very good judge of surgical cases—no surgeon, he said, can do his duty who is not allowed to prescribe. (Here Sir Astley gave a very marked case in point.)

With respect to works on anatomy, Sir Astley recommended Mr. Green's late work:—for one of a more elaborate nature, Fyfe's—on surgery, Cooke's dictionary—he also spoke favourably of Mr. Averill's little book, on the operations of surgery. In short, the agreeable, familiar, and very friendly manner Sir Astley addressed his overwhelming audience, inviting them in the most earnest terms to command his services, publicly or privately, on all subjects connected with the study and improvement of the profession, left impressions on the mind of every one present that can only be felt, not described. Our limits necessarily compel us to cut the subject for the present, yet it is one, to which we shall frequently, during the course of the lectures, have occasion to revert.

St. Thomas's, Oct. 3.—Femoral Aneurism.—The external iliac artery was tied this day by Mr. Green, for aneurism of the femoral artery. Mr. G. also performed the operation of lithotomy on a child about 3 years of age.

Guy's.—Mr. Key's case of subclavian aneurism, detailed in No. 33 of this Magazine, is drawing towards a successful termination. The ligature came away on the 12th day.

MELANGE.

Petersburyh.—The Academy of Sciences, acting under the authority of the Emperor, has purchased General Suchtelen's magnificent cabinet of ancient medals. This cabinet consists of above 11,000 articles, in gold and silver, as well as in bronze, selected with the care and the taste of an enlightened amateur. Next to the acquisition of the Oriental manucripts belonging to M. Rousseau, the French Consul at Aleppo, a collection for which the Academy is indebted to the Emperor, that of General Suchtelen's medals is the most important that the Academy has made. A special Institution for the study of the Oriental languages, has just been added to the College of

Foreign Affairs. Twenty young persons are to be admitted, and qualified to serve as Interpreters to the Russian legations in the Levant. The two Professors of this Institution are Messrs. Desanges and Charmoy, pupils of the Royal School for Oriental languages, in Paris. Their annual salary is to be 6,000 rubles.

Method of arresting Mercurial Salivation. — M. Somme, principal surgeon to the Civil Hospital at Antwerp, announces that this consists in the use of a gargle made with acetate of lead dissolved in water, *une once d' acetate de plomb liquide dans deux livres d' eau).* It is according to his observations very efficacious, being much preferable to alum or borax gargles, or sulphur taken internally. If, says he, M. Cullerier speaks of it with indifference in the Dictionnaire des Sciences Medicales, it is because the trials made at the venereal Hospital in Paris could not but fail, from the weakness of the solution. This remedy has the disadvantage of blackening the teeth, but it is said to heal quickly those ulcerations of the mouth which generally resist other means. In the ulcers of the tonsils and palate, which sometimes follow mercurial courses, M. Sommè touches the parts with a hair pencil, charged with the pure liquid of acetate of lead.—*(Archiv. gen. de Med. Av.)*

Case in which blue Urine was voided during Enteritis.-M. Jacques Cloquet gave an account, at one of the late sittings of the Royal Academy of Medicine at Paris, of a child, thirteen years old, that discharged, for three successive days, during the worst stage of enteritis, urine of a pure blue colour, depositing a sediment of the same colour, and giving a fine indigo colour to paper immersed in it. The urine was sent to M. Pelletan, for the purpose of analysis. A member of the Academy saw a similar appearance of the urine in a patient afflicted with the acute rheumatism. — *(Rev. Med. July, 1823.)*

On the Treatment of the Bite of the Viper.—Professor Paletta, of Milan, in several cases of injury inflicted by the *coluber berus* of Pleuk, wherein the patients were nearly moribund, from sinking of the vital energy, employed external warmth, wine in small doses and frequently repeated, a diaphoretic tisan with the volatile alkali, and the external application of the same alkali to the bitten part, with complete success in every instance.—*(Annali Universali di Med.)*

METEOROLOGICAL TABLE.

AUGUST.	*Thermometer.*	*Barometer.*
Thursday 28	from 56 to 74	20·07 to 30·05
Friday 29	from 53 to 72	30·00 to 29·99
Saturday 30	from 52 to 68	29·91 to 29·95
Sunday 31	from 46 to 67	30 07 to 30·11
Sept. Monday. 1	from 43 to 69	30·13 to 30·09
Tuesday..... 2	from 43 to 72	30·06 to 29·94
Wednesday... 3	from 44 to 68	29·95 to 29·97

Prevailing winds W. and SW.—Till Sunday, cloudy; the rest of the week generally clear.—Rain fallen, 05 of an inch.

A particularly brilliant Parhelion (mock sun) was formed on Monday morning last. It was so bright for a few seconds before seven that it dazzled the eyes, and was equal in appearance to the real Sun. Its form was circular.

The planet Saturn, situated about 12 degrees west of Aldebaran, is now a very interesting telescopic object after ten in the evening.

Thursday. ... 4	from 52 to 73	30·07 to 30·09
Friday..... 5	from 48 to 71	30·06 to 30.03
Saturday 6	from 45 to 66	30·07 to 30·06
Sunday 7	from 40 to 62	30·06 to 30·10
Monday 8	from 35 to 64	30 12 to 30·17
Tuesday 9	from 33 to 61	30·15 to 30·14
Wednesday . . 10	from*32 to 68	30·12 to 30·16

Prevailing winds SW. and NE. Generally clear.

* In the year 1820, on the 20th of this month, the thermometer was as low as 30°, and ice seen the 8th of an inch thick.

London:

Printed by E. JUSTINS, 41, *Brick Lane, Spitalfields.*

Published by COX and SON, St. Thomas's Street, and 39, High Street, Southwark. Sold also by Sherwood, Neely, and Jones, Paternoster Row; Simpkin and Marshall, Stationers' Court; John Cox, Berner's Street, Oxford Street; Callow and Wilson, Gerrard Street, Soho; W. Stewart, South Bridge Street, Edinburgh; J. Cameron, opposite the College, Glasgow; Hodges and M'Arthur, Dublin; &c. &c.

THE WEEKLY

MEDICO-CHIRURGICAL & PHILOSOPHICAL MAGAZINE.

No. XXXVI.] SATURDAY, OCTOBER 11, 1823. [*Price* 4*d*.

" FLORIFERIS, UT APES, IN SALTIBUS OMNIA LIBANT
OMNIA NOS, ITIDEM, DEPASCIMUR AUREA DICTA."

OBSERVATIONS *on* FRACTURES *of the* NECK OF THE THIGH BONE. *By* SIR A. COOPER, BART, F.R.S. SURGEON TO THE KING, *&c. &c &c.*

(Continued from page 176.)

' The next observation, continues our author, relate to my experiments on animals, which prove that the head of the bone, even in healthy animals, will not unite with the cervix; and which are objected to upon the ground that they were compound fractures. Now these fractures were not compound in the true sense of the word, for they were united by adhesion and not by granulation; the wound which was made through the integuments was valvular, and healed immediately. A compound fracture unites by granulations, and a simple fracture by adhesion; but here the external wound almost immediately adhered, and, consequently it did not heal by granulations. They are also objected to on the ground of the ligament being cut through. In one of these experiments the capsular ligament was opened: in the other it will be seen it was not: both were broken by a blunt instrument. The two preparations which I have preserved, were the only examples in which the experiment was complete; but I made a great number of others, in which the fractures continued compound; and in each of these, the head of the bone either became absorbed, or was discharged by ulceration, and I never could succeed in uniting the head to the neck of the bone. I have since divided the neck of the thigh bone in a dog, and the head of the bone was three-fourths absorbed. By way of contrast, I have since divided the bone externally to the capsule, in five instances, and have preserved the bones: the wound united by adhesion, and every bone has been healed by ossific union; the natural inference is, that fractures within the capsule, do not unite by bone, but the fractures external to it readily do so. As to the bearing upon the limb, or its weight having any influence to prevent union in these animals, I have only to observe, that the muscles become contracted, the limb drawn up, and the animal cannot bear upon it for several weeks.

Mr. Brodie has fully confirmed these observations by the following account of an experiment he made, which he details in a letter to Sir A. on the subject.

" The tibia of a guinea pig was broken at the lower end. A month afterward the animal was killed. On dissection I found a fracture extending across the tibia, transversely, and so close to the ancle joint, that it was situated at that part of the bone which is covered by the reflected layer of the synovial membrane. The synovial membrane itself, and the ligaments of the joints, appeared to have been very little injured, and the broken surfaces had remained in good apposition; nevertheless, there was not the smallest union of them, either by bone or ligament, and there had been no formation of callus round the fracture. The bone in the neighbourhood of the fracture had become compact, and had, in consequence of the ossification of the medullary membrane lining the cancelli."

' As to Mr. Coles, observes Sir A. who has never seen a fracture of the neck of the thigh-bone united, and every line of whose writings shew that he is an excellent anatomist and an intelligent pathologist, I confess it gave me pleasure to find him

making a statement from accurate dissections, which accords with all I have observed in the last 39 years; and further, I was gratified that his enquiries must lead to the same conclusions, because a few contributions of a similar kind, from the ardent pursuers of morbid anatomy, would soon prevent patients from being *tortured with trials*, which have been *frequently repeated*, and found to be *uniformly unavailing*.

'My belief is, that it is wisely ordained by nature, that this, and the other bones I have mentioned—the patella, the olecranon, and extremities of the bones within the articulations, should not, as a general rule, unite by bone; for I find that if the neck of the thigh bone be shortened, and falls toward the shaft of the bone, the person is unable to move his hip-joint, and becomes, what is vulgarly called, bed-ridden: the cause of this is easily explained: for when the cervix is shortened, the trochanter falls upon the acetabulum, and the play of the thigh bones become destroyed. In an ossific union of the cervix femoris, if such should ever occur, as the neck of the thigh-bone is greatly shortened very soon after the accident, the same effect would be produced, and the play of the limbs be destroyed; more especially when the callus, by which the union would be produced, must occupy a considerable part of the acetabulum, and patient's state would probably be much worse than in that of ligamentous union.

'It has been said that I have a strong prejudice upon the subject of union of the fractured neck of the thigh-bone, but this I cannot allow. When I began practice, I made use of all "appliances and means to boot" to produce an ossific union, but finding I could not succeed in a single instance, and that my patients suffered not only in health, but from sloughing and sores on the back, which sometimes destroyed them, I gave up the attempt, and now aim only at tranquillizing the parts to prevent inflammation, and thus lessen the degree of injury; and I endeavour as soon as possible to restore to the patient an useful limb by crutches—by a high-heeled shoe—and by the aid of a stick, until he can walk without one.

'I have witnessed, says Sir A. the practice of Mr. Cline, Mr. Chandler, and Mr. Birch; of Mr. Warner, Mr. Lucas, Sen.; Mr. Forster and Mr. Lucas, Jun. in our two hospitals of St. Thomas' and Guy's, and I have seen the practice of a great number of surgeons in London, yet I never saw one of these gentlemen succeed in uniting a fracture of the cervix femoris within the capsule, although means were tried which their minds could suggest. Were these surgeons all prejudiced?

(*To be continued.*)

Some Account of the Professional Writings

Of the late WILLIAM HEY, Esq.

(Continued from p. 167.)

In the year 1803, Mr. Hey published, in a large octavo volume, his "Practical Observations in Surgery," accompanied by plates. A second edition appeared in 1810, and the third edition was printed in 1814. Some corrections and editions were inserted by Mr. Hey in each of the latter editions.

In the three first chapters of this work containing observations on fractures of the skull,—on caries of the tibia and os calcis,—and on a wound of the posterior tibial artery, many useful practical remarks are given; and Mr. Hey strongly recommends a straight and a semicircular saw, as preferable instruments to the trephine in common use. He likewise shows the superior advantage of these saws in removing portions of the tibia and fibula, &c. "Such a saw I can now, with confidence, recommend, after a trial of thirty years, during which time I have rarely used the trephine

in fractures of the skull, &c. It is of great importance that the saws should be constructed exactly according to the directions given by Mr. Hey, or the operation will be very tedious, and may sometimes disappoint the expectations of the surgeon. The fourth chapter treats on the cataract: in the management of this disease Mr. Hey's experience was very extensive, and his operations generally successful. He practised the method of couching, or depressing the cataract; and, for this purpose, he adopted the small round needle of Hilmer, "making such alterations in it afterwards as I judged likely to increase its utility." Those gentlemen in London who are chiefly consulted in diseases of the eyes, generally extract the cataract. Mr. Hey, having very seldom removed the cataract by extraction, expresses himself with great candour in the following terms: "Nor can I, from my own knowledge, appreciate the comparative merits of extraction and depression; but I sincerely wish that that mode of operating may prevail which is most beneficial to the afflicted." Both these methods of operating have succeeded well in the hands of skilful surgeons and dexterous operators; and both have failed where either of these requisites were wanting. Different modes of performing the same chirurgical operation have been recommended by surgeons of unquestionable ability, and success has attended their several methods of practice. It ought not hence to be inferred, that one mode of operating is not preferable to another, nor that prejudice or mistake, or more unworthy motives, have tinctured the several reports made on this subject. Without resorting to surmises of this nature, it may be readily conceived, that each operator acquits himself better in performing the operation he prefers, than if he undertakes a different one; that experience brings him acquainted with a number of minute circumstances conducive to his success, but which could with difficulty be communicated; and that habit confers upon him a promptitude and address, not only in directing the route of the hand, but in surmounting, or eluding difficulties, of which one less practised in the operation is not aware.

The chapter on the strangulated hernia is a very favourable exemplification of Mr. Hey's accurate knowledge, both as an anatomist and practical surgeon. In this chapter, the author has given the general methods of treating the strangulated hernia; but he has enlarged more particularly on the nature and treatment of the femoral hernia. The subject is illustrated by a number of apposite and interesting cases: he has also subjoined the narratives of some singular and unusual forms of the disease, among which is "an account of an uncommon species of scrotal hernia," in a child fifteen months old, where an intestinal hernia included in its sac was found within the tunica vaginalis testis. Mr. Todd, a surgeon of great and deserved eminence in Dublin, has published some remarks on this case of hernia infantilis, in the "Dublin Hospital Reports," in which he undertakes to show that Mr. Hey was mistaken in some of the anatomical facts which are inserted in the history of that case.

It is remarked by his son, that his father "took great pains to investigate the anatomy of the parts concerned in the femoral hernia, and seemed to think no sacrifice of time and labour too great, to obtain just and clear ideas on this subject. For this purpose, finding that his description of them, in the first edition of his work, was not considered as satisfactory, he went twice to London, once in 1805, and again in 1808, that he might explain his notions more fully, examine the parts to greater advantage, and receive addi-

tional information on the subject, by conferring with some of the most able anatomical teachers in the capital." The very friendly and respectful manner in which Mr. Hey was received by his professional brethren in London, reflected honour on their liberality, and was gratifying to himself. The dissecting room in Windmill Street was open to him, at all times, by the politeness of Mr. Wilson; he received much civility from Sir Everard Home, Mr. Abernethy, and others; but he deemed himself under peculiar obligations to the attentions of Sir A. Cooper. This gentleman showed him the anatomical preparations he had made, which tended to illustrate the object of Mr. Hey's inquiries; he discussed with great openness and candour the several points upon which Mr. Hey had doubts, or desired further information, and he dissected a recent subject, in his private dissecting room, in Mr. Hey's presence, for the express purpose of demonstrating to that gentleman the parts concerned in the formation of the femoral hernia. Mr. Hey often expressed himself in terms of warm acknowledgement, on the subject of Sir Astley Cooper's attentions to him; and he cherished the remembrance of them with the most lively sentiments of gratitude. During Mr. Hey's very short stay in London, in 1808, he demonstrated upon a recent subject, in the anatomical theatre in Windmill Street, the parts concerned in the femoral hernia according to his own conceptions of them, before a numerous and most respectable assembly of the anatomists and surgeons resident in the metropolis. His explanations were perspicuous and satisfactory, and he received very gratifying testimonies of respect and approbation from many of those who honoured him with their attendance on that occasion. The time and attention, which Mr. Hey employed in these researches in the dissecting room, at his advanced period of life, had a most unfriendly influence upon his health, and he had nearly fallen a sacrifice to the zeal and perseverance with which he prosecuted the improvement of his profession. He became seriously ill on his journey to Leeds: his complaint assumed a most alarming aspect on his arrival at home, and many months elapsed before he was capable of resuming his accustomed occupations.

The chapter on the fungus hæmatodes contains some new and important information concerning a disease, of which no regular and detailed description had been given. It is not pretended that, no surgeon had previously seen or described any similar malady; but a solitary history, inserted in a miscellaneous collection of cases, does not always leave that permanent impression on the mind, nor can it convey that practical instruction, which is the result of a series of narratives, sufficient in number to indicate the more common varieties of the disease, accompanied by luminous remarks, the result of much experience, and exhibiting clearly the diagnostic signs, the prognosis, and treatment of the morbid affection. The superior advantages of recording a number of histories of the same malady in a regular order and combination, are well exemplified in the volumes published by the Royal Academy of Surgeons in Paris. The accumulation of well-verified facts, all calculated to unfold and illustrate the nature of some particular disease, makes a forcible and permanent impression on the mind: as in the construction of probable evidence, although each fact taken singly is of little weight, comparatively, yet the effect of the union of concurrent facts is potent and irresistible, banishing doubt and suspense, and conducting the mind to an intelligent and well-founded acquiescence. There are some circumstances in the history of the

fungus hæmatodes, which bear much resemblance to the effects of cancer; it resembles that malady likewise in its untractable character and mode of termination. The agreement of these two diseases, in their primitive symptoms, and the phenomena attending their progress, is much less obvious. Mr. Abernethy, in his classification of tumours, does not appear to have regarded the fungus hæmatodes as one form of cancerous affection, nor would it probably be either advantageous, or correct, to class it as a variety of this disease. The fatal cases mentioned by Monro, where bloody lymph was discharged in large quantities from the breast, on making a puncture, have no affinity with the malady described by Mr. Hey: from the histories given by the Professor, they seem to warrant his regarding them as of a cancerous nature.

(*To be continued.*)

In the sixth Number of our Magazine, we gave a partial account of the following case of a Large Tumour in the Scrotum, removed by Operation, by Robert Liston, *Surgeon, and Lecturer on Surgery, Edinburgh; we are now enabled to give it in a more detailed form; as well as to subjoin another of a large tumour of the labium, removed by the same Operator.*

In the end of last year, James Jeffrey, æt. 22, applied to me on account of an immense tumour, involving the external organs of generation, which had commenced when he was only ten years of age, and had gone on increasing gradually from that time. It measured 42 inches in circumference, and 40 from the verge of the anus to the pubes, betwixt which parts it was attached. The greater bulk of the tumour lay behind, and extended lower than the patient's knees; but, notwithstanding its prodigious size and weight, he walked tolerably well, and without the assistance of artificial support to the mass. The skin over the swelling was exceedingly coarse, and necessarily much stretched. From this cause, the hairs of the pubes, &c. were very thinly scattered. The urine escaped through the lower part, from the fissures of a large warty mass. The patient had been very anxious for relief; and for that purpose, and at various times (more especially when the swelling was very small), had applied to many practitioners; but no one proposed any means of relief or cure, and, for many years, the poor man, unable to follow any occupation, had lived a burden to himself and others.

On examining the tumour attentively, I formed the resolution of removing it, and communicated this to the patient.

He did not apply to me again till near the end of February, when he had taken a firm determination to run every risk, rather than continue to carry longer his daily increasing load.

On the 26th of February, the operation was undertaken. The patient was placed over a table, and the incisions made from behind. I had intended to preserve as much of the genital organs as I might find it possible to do, on examining their attachments and connexions with the diseased mass. But immediately on the bistoury being carried round the base of the tumour, the hæmorrhage was so profuse, that any attempt of the kind had to be abandoned, for the more essential and immediate object of saving the patient's life. Any attempt, then, to save these organs (of which he had never known the use—of which he never could have had any use—and which, after all, would have cut but an awkward appearance in the perineum, without any covering), would undoubtedly have been fatal.

The tumour was therefore detached as rapidly as possible—in not very many seconds; and the mouths of the large and numerous vessels running into it, covered, as they weredivided,

by our fingers. I had the valuable assistance of my friend Mr. Syme, without which, the result might have been less favourable.

The flow of blood was compared by those present to the discharge of water from a shower-bath, so instantaneous and abundant was it. Before half the vessels could be tied, the patient sunk off the table, without pulse, and with relaxed muscles, voluntary and involuntary. He was turned upon his back on the floor, the remaining vessels tied, whilst a cordial (good strong whiskey) was poured into his stomach. He was soon placed in bed, warmth applied, and the exhibition of spirits, &c. continued; and before much sign of recovery could be observed, he had taken lbj. of it.

The healing of the wound, and the re-establishment of his health, was very speedy. In three weeks, he was able to walk out; and soon after, the complete cicatrization of the wound took place. He is now quite well.

The mass removed weighed 44½ lb. (16 oz. to the lbj.) and that after the blood and a quantity of serous fluid had escaped. The substance of the tumour is very dense, approaching very much to the texture of the mammary gland, and seems to pervade the whole texture of the scrotum, integuments of the penis, and prepuce. The penis and testicles are closely enveloped in it. The *frœnum preputii* is much enlarged, as thick as one's finger; and, by that, the point of the penis is attached firmly to the warty excrescence at the lower part of the tumour.

TUMOUR OF THE LABIUM.

A few weeks after the above operation, a woman, about 30 years of age, of the name of Smith, applied to me on account of a similar tumour attached to the labium. It had been growing four or five years, and, from its size, had at length rendered her almost incapable of following her employment. The removal of it was attended with considerable difficulty, from the circumstance of its neck extending along the vagina a considerable way into the pelvis. On this account, the nature of the tumour appeared very doubtful during the operation. The attachments of the tumour to the *sphincter vaginæ* were so strong as to be separated with difficulty. After this was accomplished, the contraction of the orifice was very remarkable. The case terminated very favourably. The woman enjoys perfect health.

The weight of this tumour was above 10lb., and its structure much the same as Jeffrey's.

Case of Perforation of the Stomach, &c. occasioned by the protracted Use of the Corrosive Preparations of Mercury, and of Spirituous Liquors. By U. Coste, M. D. *of the Faculty of Paris.*

In December, 1821, a soldier of the twenty-second regiment died on the 12th day of his treatment, in the hospital of Dunkirk, for sub-acute inflammation of the lungs, accompanied with thirst, heat of skin, and some symptoms of gastritis. The gastric symptoms were, however, unattended with acute pain, nor was the pain increased on pressure. The pulse was quick; the patient complained much of thirst; and the tongue was red only at its apex. The stomach retained liquids; and neither vomiting nor nausea were present. He could sit up until the seventh day of his treatment in the hospital. Leeches were applied on the first day to the epigastric region, and the treatment throughout his illness was antiphlogistic. This method of cure had no influence on the state of the disease.

Upon inspection of the body, in the presence of the medical officers of the hospital, considerable sanguineous congestion was remarked in the lungs; commencing hepatization was noticed in a portion of the right lung; and, in the left, a few tubercles

were found in a state of suppuration.

The stomach presented at its anterior part, and near the middle of the small curvature, an oblong opening, about the size of a three franc piece, through which a portion of the liquids taken by the patient had escaped. A large and deep erosion, perforated at its centre to the extent of half a line in diameter, existed near the pylorus. The stomach, through the rest of its internal surface, possessed marks of a chronic inflammation. No other perforations were observed in the rest of the digestive canal, but a number of spots of a dull red colour were situated in the internal surface of the small intestines. The omentum and peritoneum presented appearances of a recent inflammation, which was more intense than was indicated by symptoms during the life of the patient.

The state of this individual was nearly the same on the day of his death, as it was on the day of his entrance into the hospital. He complained only of general illness, and of obtuse pains in his chest and abdomen, chiefly in the former. He preserved his intellectual faculties, and up to the day of his death referred his disease principally to his chest.

Case 2d.—In February, 1822, a soldier in the same regiment as the former case occurred in, died on the eighth day after his entrance into the same hospital. He complained of violent pain at the lower part of his throat. His voice was not sensibly effected. I dreaded the presence of a foreign body in the œsophagus, but he assured me that such was not the case. Anxiety, pain, and difficulty of deglutition, with dyspnœa, continued to increase, notwithstanding the local bleedings, and the internal and external emollients which were had recourse to. The pulse was small and contracted.

Upon opening the body, we found the œsophagus croded, both anteriorly and posteriorly, through the whole of its lower third. Its lateral parts appeared like ligamentous bands. The stomach was almost entirely deprived of its mucous surface, and near its middle it had two perforations in its tunics; one was as large as a half-crown piece, the other was very small. Their margins were thin, and presented no particular character. The right lung was filled with tubercles in different stages of softening. The œsophagus and the stomach in this and the former cases, are preserved.

Upon enquiry into the history of both these individuals, before their reception into the hospital, it was ascertained that the disorganization was the effect of an improper and prolonged use of muriat of mercury in small doses, with which they had often treated themselves in order to avoid entering the hospital; and of the no less hurtful abuse of Hollands, taken with a view to excite the stomach, and repeated, both as regarded quantity and frequency, according as they found the pain and difficulty of digestion to increase.

An inquiry into certain Opinions which exist relative to the Procreative Powers of Women who are Twins, the Socius in Utero, or Co-twin, being a Male. By J. J. Cribb, Esq. *Cambridge, Member of the Royal College of Surgeons, London.*

"As the enquiry here proposed, observes the author, affects the interests of a considerable class of persons, it will not be regarded as altogether unimportant.

"My attention was first directed to the subject by some remarks contained in a paper written by Sir Everard Home, and published in the Philosophical Transactions for 1799, entitled, "An Account of the Dissection of a Hermaphrodite Dog," &c. in which paper Sir E. suggests some ingenious hypotheses on the formation of the generative organs of the fœtus in utero, and takes notice of the following phenomenon which is common among neat cattle.

"When a cow brings forth twin calves, one a male and the other apparently a female, the former always grows up to be a perfect bull, but the latter appears destitute of all sexual functions and propensities; it never propagates, and is commonly called a freemartin. Near the end of Sir E. Home's paper is the following paragraph:—"It may also account for twins being most commonly of the same sex; and when they are of different sexes, it leads us to enquire whether the female, when grown up, has not less of the true female character than other women, and is incapable of having children? It is curious, and in some measure to the purpose, that in some countries nurses and midwives have a prejudice that such twins seldom breed."

"From these remarks, together with the popular prejudice alluded to, and which certainly more or less prevails, it appears that some doubt does actually exist as to the procreative powers of this description of females. As such twin cases are by no means uncommon, it is obviously desirable to remove this question from the obscurity of a vague and remote analogy, and to place it in the clear light of fact and experience.

"With this view, I was naturally induced to apply for information to Sir Everard Home; feeling assured that a gentleman so ardently interested in promoting the advancement of natural science as the learned Baronet, would not have ventured a suggestion of so much practical importance without some strong reasons for believing it at least probable. In his reply, however, to a letter which I took the liberty of addressing to him, Sir E. merely states, that the subject had been long out of his mind, and that he had not been able to ascertain any facts respecting it. Disappointed, therefore, in not receiving the instruction I hoped for from this quarter, I undertook to make inquiries respecting this description of females who were married, and the following is the information I have acquired:—

1. The widow Gillam, now living in the alms-houses in Jesus Lane, Cambridge, informed me, that she had twins, a boy and girl, about forty-seven years ago; and both are now living and have families: the daughter, who is now married, and lives at Somers' Town, has had thirteen children. I have procured the baptismal register of these twins from the church of St. Edward, Cambridge, which accords with Mrs. G.'s account.

2. Mrs Hall, of Chesterton, has had four children. I have obtained her baptismal register, also, from the parish of Cherry Hinton, with that of her brother, Richard Layton: they are registered as twins.

3. Mrs. S. M. of H. in Essex, has had ten children, and is still young enough to have many more.

4. Mrs. G. bedmaker to Emmanuel College, has had two children; one son living and grown up.

5. Mrs. Pike, whose husband is employed in the University printing-office, has had two children.

6. Mrs. Hardy, a poor woman living in Cambridge Place, is a twin of this kind, and has had several children.

7. Mrs. L. wife of a plasterer in Cambridge, has been married several years, but has not yet had any children; she is, however, not more than thirty years of age.

These are all the instances I have ascertained of women, born under the circumstances in question, having been married; and six out of the seven have had children.

Of the truth of the above statements no reasonable doubt can be entertained: most of the individuals mentioned I have seen and conversed with on the subject. They could have no motive for deception; and the baptismal register, together with the other concomitant evidence, as the testimony of their neighbours and acquaintance, tend to corroborate

the general correctness of the accounts.

The notion of the sterility of females of this kind seems to have originated in the peculiar sexual characters of the freemartin; which it was inferred analogically might belong also to the human subject, when born under similar circumstances.

A little more attentive observation, however, would have discovered that this analogy would not bear the slightest examination; for when the external characters and the anatomical conformation of the freemartin and those of the human female are compared, it ceases altogether. For, in external appearance, the freemartin differs very considerably from the perfectly formed cow; the head and neck, in particular, bear a striking resemblance to those of the bull.

The anatomy of the freemartin is sufficiently explained for the present purpose by the following paragraph, which is extracted from the same paper by Sir E. Home:—"From Mr. Hunter's observations we learn, that in all the instances of the freemartin which he examined, none had the complete organs of the male and female, but partly the one and partly the other, forming a mixture of both; and what is deserving of notice, the ovaria and testicles in all of them were too imperfect to perform their functions." The fact is, that the freemartin is a kind of hermaphrodite, but without any complete set of organs of either sex.

The human female, on the other hand, so far as my observations have extended, has nothing peculiar in her external appearance; and as so large a portion of those that are married have children, there could, of course, be no essential imperfection in the structure of their genital organs.

Both experience and analogy, then tend to establish the fact, that women who are twins with male partners in birth are as capable of having children as other women; and consequently, that the popular prejudice to the contrary, together with the doubts and surmises of the learned Baronet, are entirely without foundation. May we not, therefore, safely conclude, that if, in such females, the catamenia and other feminine characters are natural, the circumstance of geminous birth does not at all affect the probability of their breeding?

From the foregoing statement, it would appear that Sir Everard Home has here thrown out suggestions, resting merely on a popular prejudice, and an extremely remote and limited analogy; suggestions calculated to excite painful suspicion and anxiety in the minds of a considerable number of individuals, and which that degree of investigation the subject deserves, and that might so easily have been accomplished, would have shown to be utterly destitute of foundation.

Cambridge, July 16th, 1823.

M. Andral on the Developement of Adventitious Tissues.

(Continued from page 155.)

Case 3d.—Cancerous tumour of the great epiploon, developed and proving fatal in the space of five weeks.—An old soldier, aged fifty-one, entered into the Hospital *La Charité* in the course of the month of September, 1820: he complained of having felt, for eight days, somewhat severe pain around the umbilicus: there was some little fever: the stools were natural: the appearance of the tongue as in the ordinary state. The true nature of this pain it was difficult to discover. He was ordered *tisanes*, and emollient fomentations, with low diet.

The next day, the 20th, the abdominal pain was more intense, and augmented on slight pressure: the face was altered: the pulse frequent and small. The inflammation of the peritoneum had become more evident. Thirty leeches were ordered to the abdomen. On the 21st, there was a sensible amelioration of the symptoms.

On the 22d, tension of the abdomen, somewhat severe pain, obscure fluctuation. Thirty more leeches were applied.

On the following day, the abdominal pains had become moderated, and the fever was slight; but the abdomen became much tumefied; the fluctuation, however, was not manifest, and it was doubtful whether this rapid tumefaction might not depend on peritoneal effusion: the dull sound which the abdomen gave on percussion did not allow of its being referred to the developement of flatus in the intestines. From the 30th of September, an irregularly rounded, very moveable tumour, was recognized, extending from the umbilicus to near the pubes. In the first days of the month of October, this tumour became more and more evident; and it could soon be traced into the right iliac region and into the flank of the same side: at this part it was extremely irregular on its surface, and was more painful than around the umbilicus. From the 15th to the 20th of October the pain became violent: each morning we discovered the tumours sensibly increased in size since the preceding evening; they extended a little above the umbilicus and into the right flank. On the 20th, delirium and convulsions came on: he died in the course of the day.

Dissection.—The umbilical region, the two flanks, the hypogastrium, and both iliac fosæ, were occupied by a tumour attached, above, to the colic edge of the stomach, and concealed below by the os pubis, beneath which bone it extended.

Detached from the stomach, and turned downwards, the arch of the colon, to which it adhered; the small intestines, covered with membraniform exudations; the cœcum; and the two portions—ascending and descending—of the colon, might be successively observed.

The situation of this tumour, its direction, and its connexion, did not suffer us to doubt its belonging to the omentum. It was of a remarkable hardness, very thick, rugous, and knotty on its surface: when cut into, it presented to us, in many parts, a bluish white tissue, semi-transparent and gristly (scirrhous tissue in a crude state): in other places there were small cavities, occasionally of a somewhat rounded form, sometimes oblong, and more or less anfractuous, filled with a gelatiniform liquid: the smallest of these cavities would have contained a pea; the largest a great almond (scirrhous tissue in a state of softening). Mixed with the preceding tissue, another of an opaque white colour was every where observable, in which blood-vessels ramified; these, in intersecting each other, left between them areolæ more or less irregular (encephaloid tissue in a crude state): in two or three points only, there existed a pultaceous, reddish substance, somewhat resembling the matter of the brain when in a state of incipient putrefaction, and stained with blood (encephaloid tissue in a state of softening). Finally, in some places the white colour of the preceding tissues was mixed with a tolerably deep brown tint, which probably indicated a commencement of melanosis.

In the midst of these different tissues, there were discovered also, in tolerably great number, the fatty substances which commonly exist in the healthy epiploon.

There are, I believe, but few facts in the annals of science resembling the preceding. In the space of less than five weeks, and at the end of a somewhat slight peritonitis, a cancerous tumour invaded the epiploon; acquired, each day, an increase sensible to the eye and to the touch; and at last finished by lining, in some measure, almost the whole of the anterior paries of the abdomen.

How are we to arrive at the cause of such a rapid developement? Who is there that can explain, why, on

the contrary, in other individuals, these same adventitious tissues form, in some years, a tumour scarcely the size of a nut?

In this individual, the intensity of the pain and of the fever, his frightful falling away, were in a direct ratio with the rapidity of the developement of the adventitious tissues. In the following case, which is an example of a tumour, the increase of which was still more rapid, we observed, on the contrary, neither pain nor fever; the strength also, it will be seen, kept up very well: in both, however, it was in the epiploon, and after peritonitis, that the tumour developed itself: this difference of the symptoms, however, may perhaps be explained by the difference of the tissues produced. In the third case it was a cancerous tissue; in the subject of the fourth the tumour was formed by the tuberculous tissue, &c. &c.

HEADS OF LECTURES *delivered by* SIR A. COOPER, Bart. *at* ST. THOMAS'S HOSPITAL.

CONSTITUTIONAL IRRITATION.

Monday, Oct. 6.—This lecture commenced by pointing out in what manner diseases are repaired, and how trifling complaints frequently prove fatal by injuries falling upon important organs, *e. g.* the brain, heart, stomach, &c. The nervous system is influenced the moment an injury is received; and the shock is conveyed to the brain, spinal marrow, &c. interrupting the various functions.

"By irritation is meant a degree of excitement occasioned in the actions of the body; and that which produces it, is called an irritant. The difference between an irritant and a stimulant—the first is an unnatural, the second a natural stimulus. Irritation may be either considered local or general—the effects are produced upon and by the nervous influence, *e. g.* when a nerve is wounded, the injuryis felt in parts remote from it. A disease, for instance, in the tooth, not unfrequently produces an abscess which works its way through the cheek, &c. In these cases the cause is to be traced before the effect can be removed. As examples of general irritation being produced from local causes—people turn pale and fall down from the introduction of a bougie, in fact, often faint. Fainting is a suspension of all the vital actions, and may be produced from local causes. A slight blow on the stomach frequently destroys life. A man lifting a heavy weight, received a blow in the region of the stomach at the time the muscles were unprepared, instantly dropped down dead—every possible means were used, without effect, to restore him. On inspecting the body, nothing was perceived that could lead to a detection of the injury, with the exception of a slight ecchymosis on the coats of the stomach. The cause of sudden death from external violence of this description is not sufficiently explained;--directly behind the stomach there is a particular organ connected with a particular set of nerves, (semilunar ganglion,) which, in all probability may be among the causes. There is an universal connexion of the parts of the body with one another, but more particularly in some than in others; all this is called sympathy.

"The symptoms of irritation very much resemble those of fever. Compound fractures often cause but slight local effects, but the morning succeeding the accident there is pain in the injured limb, next in the loins, in consequence of the confined position of the patient, which affects the spinal marrow about the cauda equina; next the brain, and ultimately the intestinal canal. When the irritation is slight, the fur on the tongue is white—when more considerable, yellow; and when very great, black, like that of the typhoid kind. The

stomach is next influenced, occasioning the loss of appetite, and consequent vomiting. The patient suffers for several hours under these unnatural actions. The secretions of the different viscera are suspended. If the motions are white—no true bile is secreted—the secretion of the skin is also checked, and those of the kidnies in a considerable degree; and the heart is excited to inordinate action.

"There are two kinds of diseased sympathy—the one is called sensation, the other, the action of the part. *As examples of the first kind:* an obtuse pain is felt in the loins from diseased testule: in disease of the hip joint, pain is felt throughout the whole course of the sciatic nerve, from the knee to the foot; often leading the surgeon astray, when consulted by a person who complains of pain in the knee: stone in the bladder causes sharp cutting pains at the extremity of the penis, both before and after making water: disease of the prostrate gland causes a sense of pain down the inside of the thigh and in the perineum, &c. —disease of the stomach will produce pain in the left shoulder—disease of the liver a sympathetic affection of the right shoulder—diseased testicle, pain in the loins—affection of the mesenteric glands of the rectum, produces itching at the nose. *Examples of the second kind,* or sympathetic action: diseases of the urethra very frequently produce inflammation of one or both testicles: the glands of the groin, in consequence of gonorrhœal inflammation, are often affected with sympathetic bubo: hiccough, which is a convulsive action of the diaphragm, is a symptom of mortification,—of all the organs to which these effects are produced, none are more frequently affected than the stomach—a blow, for instance on the head, causing injury to the brain, produces vomiting—vomiting is also produced when the testes or intestines are injured. Pressure on the brain will stop the motion of the heart to a great degree; but the cause being removed it again re-acts.

"Irritation depends on four principal circumstances;—on the size of the wound—on the part injured—on the ease with which it can be restored —and, on the constitution of the patient. The violence of the symptoms depends on the efforts of nature to restore the injury, and the importance of the parts injured; and the more essential these parts are to life, the more the irritation is rapid and extreme, and it arises solely from a change induced in certain parts of the body in consequence of it. Moreover, the violence of these symptoms depends, in a great degree, when the parts are not vitally important, on the irritability or susceptibility of the constitution, and, in proportion as the latter will be able to resist the influence of irritation, so will the strength and force of it depend; for the most violent effects are produced in some persons from the slightest causes, which in others would have been comparatively trifling.

"Irritation produces a quick hard pulse, which beats forcibly with a diminished diameter. If the irritation be very great, the pulse becomes so small as scarcely to be perceptible—but it rises considerably under the loss of blood. The brain and nervous system are the agents of irritation—the nervous primarily; and the vascular system secondarily.

"There is a species of chemical irritation which produces the following symptoms—rigors, chilliness, &c. succeeded by profuse perspiration, which relieves the fever but exhausts the strength; by successions of these excessive actions the patient sinks.

"*Rationale of the symptoms of irritation.* An injury sustained by any part of the body gives a shock to the nervous system by which every part is informed of it. Nature flies to restore that part by carrying the blood thither to repair the injury—

there is, in fact, a general sympathy excited towards the place. Nature can direct the blood to one part of the body in preference to another—if irritation be caused in the finger of one hand, pulsation will be immediately felt there, but if, in the same finger of the opposite hand, the pulse be tried, none will be found. There is a power of local determination—the action is directed to the inflamed part in preference to any other. Injured parts are repaired through the medium of the blood and the force of the circulation—the influence is directed from the nerves to the spinal marrow and brain, from these to the heart; and from the heart, to the seat of the injury.

"If the symptoms are violent from sudden shocks, &c. there will be no pulse at the wrist, and scarcely any felt at the elbow; but, if the hand be placed on the region of the heart, a fluttering will be felt. Secreting parts very readily run into suppuration—a small wound of the knee-joint frequently occasions the loss of life in four days. Nature is averse to the restoration of parts where it is attended with difficulty.

"Many are the victims to slight injuries. Bleeding at the arm has been repeatedly known to prove destructive to life—not from puncture of the artery, but from a high degree of erysipelatous inflammation.—A thorn in the finger has produced tetanus, and destroyed the patient in a week.

"Among the last causes of irritation is age—it is greatest in infancy—children under two years of age bear the operation for the stone extremely ill—but after the third year, they undergo it very well. (Sir A. here observed that he had performed the operation for stone, at the age of one year and nine months, although he is by no means an advocate for early operations of this kind.) Amputation, in very young subjects, endanger life by convulsions. Extract of opium diminishes general irritation from local causes, applied externally, more so than any other preparation. Case of amputation in a child by Mr. Lucas exemplified in support of the assertion. The belladonna has the same effect mixed in the proportion of one drachm to seven drachms of honey—there is one objection however to its use, and that is merely evanescent; viz. dilatation of the pupil; which, after a few hours, subsides without any bad effects.

"Operations are always attended with better success in advanced age than at the middle period of life. If I were to choose a subject to operate upon for the stone, observed Sir A. I would choose one of sixty—of a thin spare habit—active—in tolerable health—these seldom die. Between thirty and fifty are precarious subjects. From seven to twenty-one are good subjects, and bear the operation well, &c.

"*The treatment of irritation* is nearly similar to that of inflammation. A certain degree of irritation is necessary in diseases: where it is violent, it is to be moderated. The first object is to remove the cause of irritation—there are two means of reducing it—the first is to restore all the secretions—unless this be effected very little is done. 2nd. To lessen the irritability of the body,—opium and antimony; after the other secretions have been attended to—the one calms the irritation whilst the other restores the secretion of the skin. There is nothing equal in constitutional irritation, to calomel and opium in the proportion of three grains of the former to a quarter of a grain of the latter, followed up with saline aperients. The liquor ammon: cacetat. and tinct. opii. is also of advantage in restoring the secretions of the skin,—and calming the irritability of the system: the patient sleeps, a profuse perspiration comes on, and ease is acquired. It is un-

wise to abstract blood in compound fractures—although, as a general principle, it may be done—still it weakens, in most cases, the vital powers, and renders them deficient of that energy necessary to bear up against the effects of the injury when the strength of the constitution is most needed.

"The best remedy that can be given in chronic irritation, is the pilula hydrargyri submuriatis of the old pharmacopæia—it acts upon all the secretions. If the blue pill be given, it should be combined with the cathartic extract, &c. &c."

HOSPITAL REPORTS.

ROYAL INFIRMARY, EDINBURGH.

Ligature of the Subclavian Artery.—The left subclavian artery was included in a ligature (August 23) by Mr. Wishart, and hitherto there is every prospect of success. The subject was a man, aged 47, by trade a porter. He had a large aneurismal tumour situated under the left pectoral muscle, and in close contact with the clavicle, attended with considerable pain and swelling of the corresponding arm. The time occupied in the operation, and in dressing the patient, was about twenty-one minutes. Three small arterial twigs were cut in the first incisions, which were immediately secured by ligature, but there was no venous hæmorrhage, and the patient did not lose above a table-spoonful of blood during the whole operation. The ligature, consisting of two threads, was placed round the subclavian artery, immediately after it had passed through the scalenus muscle, and close by the tubercle of the first rib. Two of the nerves which go to form the axillary plexus were distinctly exposed; but neither the subclavian artery nor vein was seen. The artery lay deep in the wound; but it was readily embraced with the ligature, by means of the common aneurismal needle. No mechanical contrivances were required to tighten the ligature, as this was easily effected by the finger.

As soon as the ligature was tightened, all pulsation in the tumour ceased. In the course of the day, the patient complained of numbness in the arm and hand, but the heat of the limb never sunk below the natural temperature. The aneurism gradually diminished in size, and the pain and general swelling of the limb daily subsided. On the tenth day after the operation, pulsation could be felt in the brachial artery; on the sixteenth day, the ligature in the subclavian came away; on the seventeenth, the pulse in the aneurismal sac was distinct at the wrist; and this day, (September 9, 1823) the eighteenth from the operation, every circumstance is favourable.

EDINBURGH, Sept. 2.—*Amputation at the Hip Joint.*—The first operation of the kind ever performed in Scotland, took place here this day, in the presence of Dr. Abercrombie, Mr. Liston, and several other professional gentlemen, by Mr. Jas. Syme, Fellow of the Royal College of Surgeons, and Lecturer on Anatomy in this city. The subject was a lad nineteen years old, affected for the last two years and a half with necrosis of the whole left thigh-bone, which had acquired an enormous thickness, and several fistulous sinuses were discharging matter profusely at various parts from the thigh, and the lad was reduced to an extreme state of emaciation, before he would consent to the removal of the limb. The plan of operation was that of Mr. Lisfranc, slightly modified. It was completed in a very short space of time, no untoward accident occurred, and little blood was lost, although, as may easily be imagined, the number of vessels to be secured was unusually great. For thirty-six hours afterwards, the patient suffered from severe and excessive vomiting, which, however, was removed by appropriate treatment before the close of the second day. On the fourth the dressings were changed; on the fifth several clots of blood were discharged, and the wound looked well. Since then it has been daily improving, the suppuration is moderate and healthy, the lad's appetite, pulse and strength are good, and altogether the case holds out the most flattering prospects of ultimate recovery. We hope to communicate further particulars in some early Number.

GUY's, October 2.—AMPUTATION. A case of popliteal aneurism came into this hospital yesterday. The sac had been increasing five months, and had become considerably enlarged with œdema of the limb—Mr. Lucas amputated, this day, in preference to tying the femoral artery.

10th.—Sir. A. COOPER performed the following operations—two cases of schirrous tumour of the breast—a steatomous tumour from the left shoulder of a female.

St. Thomas's, October 2.—Mr. GREEN performed the operation of lithotomy on a young subject; and removed a schirrous testicle from another.

MELANGE.

M. L. L. Jacobson on a Humour of the Eye little known.—We have had more than one occasion to mention the researches of M. Jacobson, of Copenhagen, who thinks he has reason to conclude—that a serosity or watery humour naturally exists between the choroid coat and the retina, and contained in a duplicature of the latter; that a minute portion of the same humour also exists on the corresponding anterior part of the retina; that this humour sometimes accumulates in so great quantity as to push forwards the retina and the vitreous humour, and to produce the disease, called by Scarpa, *Staphyloma posterior*, by distending the choroid and sclerotic; and that this humour can be displaced by a calculous deposit, which is usually, and erroneously, considered as an ossification or petrefaction of the membranes of the eye and of the vitreous humour.—(*Nye Hygeie, Copenhagen.*)

Professor Isenflamm on the Constituents of Tendons.—The school of Erlangen appears to be rising into respectable notoriety. Professor Isenflamm, one of its ornaments, has instituted some experimental researches into the chemical constituents of tendons, and seems to have established, that they differ little from muscles, with the exception of their being destitute of salts. By carefully macerating and dissecting tendons, he came to the conclusion—that they are formed of cellular membrane, arranged in fibres, accurately parallel with tendinous fibres crossing them, and forming a membrane of animal gluten, and of albumen, from which, and the fibrous texture, the satiny appearance of tendon is produced. He decides that nerves enter into their structure, whether they can be traced or not, from their sensibility when diseased; for, according to the Professor, no vital property, such as the nervous, can be generated, though it may be developed by a morbid state of the parts.—(*Archives de Médecine.*)

MM. Larrey and Roux's Case of Excreted Intestine.—In a report to the Académie Royale, upon a paper by MM. Bouniol and Rigal, junior, entitled Intussusceptio intestinalis, followed by an excretion of about thirty inches of small intestine and a portion of mesentery,—MM. Larrey, Roux, and Beclard, state, that the patient had been subject to great indigestion, and at last was affected with all the symptoms indicating internal strangulation. There were complete suppression of the alvine evacuations, stercoral vomiting, sharp pains in the abdomen and an elevated tumour very sensible to the touch in the right iliac region. In the course of twelve days, at the termination of a violent fit of colic, he voided by the anus a portion of intestine and of mesentery. From this moment his amendment was rapid, his health was restored, and there remained no other inconvenience than a slight feeling of pain in the right iliac region. About three months afterwards, the patient having eaten a very great quantity of cherries, was seized with symptoms of peritonitis and died; but the body was not inspected. M. Larrey thinks that a portion of the intestine must have been invaginated, strangulated, and seized with gangrene, separated in consequence from the living tissues, and thrown into the great intestines, whence it was ejected. In wounds of the intestines M. Larrey has seen them re-united as neatly as if it had been done by the suture of a glover. Two pieces of intestine, indeed, unite most readily, as M. Larrey has demonstrated by experiments on dogs.

M. Dommanget on Small Pox.—Dr. Clutterbuck will be *ravi* to see that M. Dommanget's dissections tend to support his theory of fevers. In several cases of small pox, M. Dommanget found the membranes of the brain either inflamed, in a state of adhesion, and injected or covered with effused matter. The brain itself was either softened or its substance injected. The lungs were sometimes hepatized and sometimes engorged. There were adhesions and inflammations of the pleura with albuminous affections; and the stomach and intestines were usually inflamed. —(*Journ. Général.*)

Segalas d'Etchepare on the Action of the Chlorate (Oxymuriate) of Soda on several Animals.—This substance has already been proved to be very efficacious in destroying infectious effluvia. It has also come into use in several hospitals, and even amongst some practitioners as a detersive application to ulcers of different kinds, and particularly to those of a venereal nature. Several experiments on dogs have been made to prove its power over the animal economy. The effusion of a dram of the solution on the denuded pectoral muscle caused severe pain. An ounce of the liquid injected into the stomach of a large dog produced immediate vomiting, &c. so as to reject the whole of the substance. Two ounces of the liquid were then introduced into the stomach of the same animal by an opening made in the œsophagus, and retained by a ligature; he made repeated efforts to vomit. Having survived

the operation, he was killed twenty-four hours afterwards. The stomach was found inflamed throughout with the exception of a small portion near the pylorus.

In some of the animals killed, the veins were filled with blood of a less deep colour than usual, and there was a strong disposition in the muscles to contraction. The conclusions from these experiments are, first, that the chlorate of soda ought to be reckoned amongst the class of irritating and corrosive substances. Secondly, that the solution (the solution employed was one marking twelve degrees of the aërometer) besides its direct and sympathetic action on the solids, exerts by absorption a manifest action on the blood. Thirdly, that it ought to be used with extreme caution on denuded surfaces, and especially on the parts of generation.

The chlorate of soda is rarely employed pure, but diluted with six or eight parts of water, when it becomes much less irritating.—(*Magendie's Jour. de Phy.*)

LITERARY NOTICES.

In the Press, *and shortly will be published*, a New Edition of DENMAN's MIDWIFERY, (Cox and Son.)

The SPORTSMAN, FARMER, and CATTLE DOCTOR's POCKET COMPANION; containing separate Observations on Black Cattle, Sheep, Dogs, and Horses; including the method of Treating the Diseases to which they are liable. With a variety of interesting matter, *e. g.* Laws of the Leash, Coursing, Breeding, Training, &c. &c.

THE MOTHER's MEDICAL and PHYSICAL POCKET BOOK, 18mo. —*We were favoured with a perusal of the manuscript of this Work, previous to its going to press, and we can safely, from what we have seen and compared, pronounce it to be considerably better calculated, than any of the kind extant, for the purpose intended, independent of the novelty of the plan; and we have no doubt, it will soon be in the possession of every Mother and Nurse, for whom it is designed. It combines, in well arranged order, all that is necessary to be known and attended to, in the rearing of Infants from the time of birth onwards; with the method of treating the various Complaints to which Children in general are liable, as far as domestic Medicine may be trusted to, &c. Neither is the Mother or the Nurse forgotten.—The management of Sore Breasts; with general directions in both capacities, are explicitly laid down for their guidance, &c.*—A work of this kind has long been wanted in private families.

Just Published—First Volume of the MEDICO-CHIRURGICAL and PHILOSOPHICAL MAGAZINE, with an Index, boards, price 8s.

MAJENDIE's PHYSIOLOGY, Vol. II. Part I. translated by J. S. Forsyth, Surgeon.

A TREATISE on PRACTICAL CUPPING, &c. By Samuel Bayfield.

A new and correct Edition of CULLEN's NOSOLOGY, in English and Latin—separate or together.

Important to Pork Butchers and Pig Doctors "of London."—A disease, in many instances fatal to the bristly tribe, called the *gargle murrain*, has manifested itself among the pigs in Middlesex.—*Med. Hall, Piccadilly.*

Quere—Would *a tea-spoonful* of the tincture of *buchu leaves*, three times a day —*Harrowgate* water—a *blue pill*—a few drops of the *aqua mirabilis*—or a pinch of *asarabacca*, as administered to Joanna, in the *mulligrubs*, by her far-famed *physician* and votary, be of any service in the preservation of young grunters?

Perhaps the learned "*Doctor*," having noticed the subject, intends to favour the sow-gelders and cow-leeches with another *set* of conundrums.

TO CORRESPONDENTS.

Philanthropos *should have been accommodated before this, had the temper of his second letter corresponded with that of the first. The respectability of the parties aimed at claim our sanctuary, against every thing like wanton or illiberal attack.—(Vide Letter first, No. 27.)*

Dr. D———'s letter is received.—We beg leave to recommend him to his alternative, in the mean time.

It would be a pleasure to us, independent of the advantage held out, could we possibly comply with R——'s request—but, for the present, at least, it is impossible.

J. J. is received: we shall notice his communications in our next Number.

Letters *and* Communications *for this Magazine, (post paid) as well as* Advertisements, *are to be addressed to the Publishers.*

London:

Printed by E. JUSTINS, 41, *Brick Lane, Spitalfields.*

Published by COX and SON, St. Thomas's Street, and 39, High Street, Southwark. Sold also by Sherwood, Neely, and Jones, Paternoster Row; Simpkin and Marshall, Stationers' Court; John Cox, Berner's Street, Oxford Street; Calloyv and Wilson, Gerrard Street, Soho; W. Stewart, South Bridge Street, Edinburgh; J. Cameron, opposite the College, Glasgow; Hodges and M'Arthur, Dublin; &c. &c.

THE WEEKLY

MEDICO-CHIRURGICAL & PHILOSOPHICAL MAGAZINE.

No. XXXVII.] SATURDAY, OCTOBER 18, 1823. [*Price* 4*d*.

"FLORIFERIS, UT APES, IN SALTIBUS OMNIA LIBANT
OMNIA NOS, ITIDEM, DEPASCIMUR AUREA DICTA."

COLCHICUM AUTUMNALE.

Common Meadow Saffron.—(Radix vel Bulbus recens.)—*Vide Plate.*

For the general botanical characteristics of this peculiar plant, we beg to refer our readers to the splendid work* whence we extract the following account.

The colchicum is a perennial plant growing in moist meadow grounds in the more temperate countries of Europe—it flowers about the beginning of autumn without leaves, and bears the fruits before the former appear. The bulb is a very powerful and active medicine, which we have opportunities of witnessing its effects upon brutes; in them it occasions violent vomiting and purging, which is followed by inflammation of the stomach and bowels; independent of the effects from its immediate application to these parts, it becomes absorbed and acts upon the nervous system, for, when applied to the skin it produces similar effects as when taken into the stomach, which must depend on its being absorbed and carried into the circulation. All parts of the plant possess similar properties, although less active than the bulb.

The medical properties of the colchicum are diuretic, purgative, emetic, &c.

Baron Stoerck particularly directed his attention to this drug in the cure of dropsies and several other complaints; and it is still much used on the continent. In England, however, the colchicum has not been very generally used owing to the uncertainty that attends its operation, and the great caution which is requisite whilst administering it. In the cure of gout it has acquired considerable celebrity—for this troublesome and painful disease it has been taken by many persons with the best effects, acting almost like a charm in setting aside a paroxysm; and one of the most celebrated men in this country is constantly in the habit of taking it with the most happy results in curing fits of the gout. In some, however, it produces the most distressing symptoms, such as violent vomiting and purging, succeeded by symptoms denoting derangement of the nervous system. We must therefore consider ourselves very much in the dark as to its general application in practice; experience alone can determine in what constitutions it may be given with impunity and advantage. In the sub-acute and chronic forms of rheumatism, it has been administered with evident relief to the patient, in doses of ʒss. three or four times a day.

The most essential and indeed only active ingredient in the *eau medicinale*, is a vinous infusion of colchicum—and a form of this prescription is a more preferable way of giving it than any other. The dose of a saturated vinous infusion is from ♏. xx. ad. ʒij.—it is neces-

* Medical Botany, or History of Plants in the Materia Medica of the London, Edinburgh, and Dublin Pharmacopeias, arranged according to the Linnean system. 2 vols. royal 8vo. illustrated with 138 coloured plates, and a portrait of Linnæus, from an original painting.—(Cox & Son, Borough.)

sary to increase the dose gradually. —The officinal preparations are the acetum colchici—oxymel colchici—syr. colchici, &c.

HEADS OF LECTURES *delivered by* SIR A. COOPER, Bart. *at* ST. THOMAS'S HOSPITAL.

LECTURE II. — ON INFLAMMATION.

Oct. 14.—" The characteristic symptoms of inflammation are four; viz. redness, swelling or tension, increased sensibility—increased heat: —the redness is a consequence of the distended state of vessels receiving a greater portion of the red particles of the blood;—the swelling is owing, not only to the increased determination of the blood to the particular part, but also to the absolute effusion of coagulable lymph in the centre, surrounded by serum. The increased sensibility is supposed to arise from the alteration which the nerves undergo from the tension of the part. It is wrong to operate on inflamed parts, they rarely proceed well in the healing process. With respect to increased heat Mr. Hunter did not admit of it in inflamed parts; and made several ingenious experiments to support his arguments. He introduced a thermometer into the rectum of a dog and found that the quicksilver stood at 101°—he then injected a solution of corrosive sublimate by which a violent inflammation was produced —on re-applying the thermometer there was no sensible increase of heat—the thermometer still stood at 101°. Mr. H. also introduced the thermometer into the vagina of an ass—it stood at 100°.—on producing inflammation it fell to 96°. but soon afterwards rose again to 100°. without any further increase.—The surface of the skin varies considerably under inflammation—several degrees of heat will be produced by the application of a blister. Increased heat is now universally admitted.

" Inflammation has four results or terminations; viz. adhesion, suppuration, ulceration, and gangrene. Inflammation is healthy or unhealthy—after operations it is of a healthy nature—if it arise spontaneously it is unhealthy. It is chronic or acute—by acute inflammation is meant that which passes through its different stages with rapidity—the chronic is slow and languid, and is the result of an affected constitution, or of a long continuance. Common inflammation is when it is healthy—specific inflammation is that in which there is a peculiar action of the vessels by which a different secretion is produced than that which is the result of the former. Schirrous inflammation approaches to the nature of cartilage, and results from a peculiar action of the part, and dependent on some change in the constitution—e. g. Fungous disease is occasioned by a peculiar action of the part, and is dependent on a change in the constitution brought on by mental anxiety—an affection by which nine cases in ten of these diseases are occasioned. Scrophulous inflammation is of a weakly kind, arising also from some peculiar state of the constitution—it is congenital, although it may result from intemperance, &c. Specific inflammation is a consequence of the application of poisons. The mucus of gonorrhœa is capable of producing a poison similar to that which is applied—so it is with that of chancre, small pox, measles, &c. a small quantity of matter of this description produces the same effect as a large quantity.

" In inflammation the nerves are sometimes more affected than the blood-vessels—e. g. A person applies for advice with a pain in some joint of the fingers, which is only felt on some particular bearings of the part—still there is no redness or any thing that can lead to a detection of the seat of the pain—these pains

have been imagined to be fictitious, although this is not the case—they result from some particular nerve taking on a particular inflammatory disposition—a kind of tic doloureux:—the eye—the breasts in females, from the age of 17 to 25—the testes, bladder, rectum, &c. are all liable to this species of irritative inflammation.

"Inflammation of the arteries is very extensive, even going to the heart itself—in the veins its progress is slower; and when it reaches the valves its progress is arrested—the absorbents in inflammations may be distinguished by red lines under the skin, feeling like cords, and frequently terminating at the first absorbent gland—that of the membranes of large cavities is very extensive. Inflammation of the bones is accompanied with an obtuse and almost intolerable pain—the constitution suffers more irritation than from the most acute pain—inflammation in the muscles produces spasm—in tendons sloughing to a great extent—in glands, if general, it stops their functions, but if only partial these functions continue—of the liver no bile is secreted—of the viscera in general, it affects all their functions more or less, &c.

"An irritable constitution predisposes to inflammation—irritability is in proportion to the weakness of the constitution—e. g. fever and fractures:—a fever of three weeks standing will produce a greater degree of inflammation of the parts on which the body rests, than a fracture that confines the patient to the same position for as many months—it is no uncommon thing to see children die from the effects of a blister on the chest after the measles:—scarlatina also produces extensive ravages in the same way; the mucous membrane of the nose, throat, ears, &c. are all liable to affections from causes originating in a weakened state of the constitution. Under a mercurial course it is not adviseable to perform any operation that could otherwise be avoided;—a high degree of inflammation apt to supervene in consequence of it.

"The common causes of inflammation are destruction of the blood-vessels—congestion—long continued pressure, extraneous bodies, &c.

"The proximate cause of inflammation has long been a matter of some controversy—Bœrrhaave supposed it to be a thickened state of the blood—but this is not correct, for, on the contrary, the blood under inflammation becomes attenuated and flows with more than ordinary freedom:—according to Cullen, spasm of the extreme vessels, and this is far from being considered conclusive:—according to Hunter inflammation ought only to be considered as a disturbed state of parts requiring a new salutary action to reinstate them:—he also observes that it is to be considered as an increased action of the vessels of the part,—an increase or distension beyond their original size and diameter—it is not a relaxation, but merely a temporary dilatation, and a necessary operation of nature.

HEADS OF LECTURE III.

Wednesday, October 15.

"*The treatment of inflammation* is either local or constitutional. Constitutional treatment is required when inflammation has fallen upon any important organ—e. g. the brain, heart, lungs, &c. which may be affected primarily and secondarily.

The most powerful means of treating inflammation is by drawing blood either generally, as from the arm, &c. or locally on or as near as possible to the part affected:—the influence of blood-letting is that of diminishing the nervous powers, in the first place—and secondly, lessening the quantity, and weakening the momentum and force of the heart—thirdly, by bleeding until the secretions be more

easily promoted :—it is often difficult to restore them without these measures.

"The principal indication of bleeding is a hard pulse:—by a hard pulse is meant that where the action is strong, and the diameter of the vessel diminished, and feels as if an iron wire were beating under your finger. The hardest pulse is that which is felt under inflammation of the substance of the heart—there is a hard pulse in inflammation of the brain and lungs, but nothing in comparison with the former. Whenever the stomach or intestines is affected with inflammation, the pulse is not one third, and often not one sixth of its usual diameter.

"Quickness is no indication for bleeding; but combined with hardness it is—of itself it denotes debility. The indication for repeating bleeding is said to be a buffy state of the blood; but without the hard pulse it cannot be considered as such. A contracted hard pulse indicates bloodletting—a buffy and contracted state of the blood may exist with a quick pulse. The average quantity of blood taken away on ordinary occasions at one time is from 12 to 20 ounces. Too much blood should never be taken away, or the constitution may be so weakened as to destroy the powers of reparation. The quantity of blood that may be taken away before death ensues, may be estimated at an ounce for every pound weight of the animal.*

"Blood drawn for the purpose of subduing inflammation should be taken away suddenly from a large orifice—the quantity then is not so great: e. g. in inflammation of the lungs when difficulty of breathing comes on and the constitution rather delicate, abstracting blood from a large orifice, about five or six ounces, sometimes much less, will generally suffice; repeated as the urgency of the symptoms may indicate. Blood drawn from an artery produces fainting sooner than when drawn from a vein. If a patient be too much reduced in the first instance from depletion, they are not raised again:—in diseases that are likely to prove tedious and in those of a chronic nature, depletion is bad practice, &c.

"The second mode of relieving inflammation is by restoring the secretions of the body :—the principal secretions are those from the intestinal and alimentary canal, the liver, skin, and kidneys. The want of secretion in the alimentary canal is the cause of disease. The blood is shut up in the system and the secretions are arrested. The length of the intestines is about 27 feet—the circumference 4 inches, which gives a secreting surface of 1,300 inches—which, when no longer secreting, the blood is locked or shut up in the system. These secretions are re-produced by purges—1st. by producing a considerable evacuation from the blood, mixed with fecal matter :—2nd. by deriving blood from one part of the body and directing it to another. Nature has scarcely the power of supporting two irritations at the same time.—3d. by evacuating the previous contents of the intestines. The contents of the bowels very rarely irritate, although some are of a different opinion. It is the arrest of the secretions and not the accumulation of the fecal matter which is the cause of irritation upon the system. It is necessary to act upon the liver at the same time as the intestines—give, for this purpose, calomel or other forms of mercury; followed up by saline purges—the

* In support of this assertion Sir A. made the following experiment—he laid bare and opened the jugular vein of a dog that weighed about 14lbs. and drew away 11oz. of blood before the animal fainted; when he would bleed no more: he remained in a state of convulsive respiration:—the carotid artery was then opened, and in this manner three ounces more were drawn away, making in all 14oz.

best form is the hyd. submur. at night—and a saline aperient in the morning—or, 1 gr. of calomel and four grains of cathartic extract—or pil. hydrarg. gr ij.—Extract colocynthidis gr iij. The infusio sennæ c. sulphat. magnes. is a very active purgative where the intestines are wanted to be acted upon. One secretion may be restored and no relief afforded; but procure the (the liver or intestines) other and this is generally done.

"Another mode of lessening inflammatory action is by perspiration—for this purpose antimony and the pulvis ipecacuanhæ compositus is usually given—with warm diluents—placing the feet in warm water—the warm bath, &c. the secretion of the kidneys is less important than either that of the liver or the intestines:—in inflammation the urine is high coloured; to change the action of the part diluents, squills, nitrate of potass, &c. are given. The removal of diseases depends upon the restoration of the secretions; neither does it depend upon this or that secretion; as, wherever irritation is set up in the system, a diminution of the secretions is effected.

"There is a species of inflammation that cannot be removed by restoring the secretions; here calomel and opium, or calomel and the pulvis ipecacuanhæ compositus is proper. In highly irritable inflammation it is not right to use depleting measures.

"There is another mode of reducing inflammation; viz. by nauseating medicines, *e. g.* in croup I have seen a child rendered quite pale from the quantity of antimony that had been administered to it in nauseating doses, given in combination with calomel; this child recovered. It is by such means that we keep down the pulse. Digitalis is also used for the same purpose. In old people it is wrong to pursue the depleting plan to any great extent, &c. &c."

M. DELPECH'S CLINICAL SURGERY OF MONTPELIER.

(*Chirurgie Clinique de Montpelier, ou Observations et Reflexions tirées des travaux de Chirurgie Clinique de cette école: par le Professeur Delpech.* p. p. 449. 4*to. Paris et Montpelier*, 1823.)

Delpech, whose surgical works, particularly his treatise on hospital gangrene, have made him sufficiently known among his professional brethren, again adds largely to his claims on their gratitude by the publication of the results of his observations, made during the space of ten years, as head of the surgical hospital at Montpelier.

This large volume contains several distinct essays on practical subjects on surgery, viz.—on the ligature of the principal arteries; on the deformities of the feet; on fractures of the humerus; and on venereal diseases. The first of these presents subjects of such extreme interest, and so many points which still admit of great modifications and improvements that no apology is made for selecting them, as many of them tend to throw light on other points.

Case I.—The patient was received from the army of Portugal at the hospital St. Eloi, March 15, 1814. Two months previous to this, a musket ball had passed through the arm, between the humerus on one side, the biceps, coraco-brachialis, and brachial artery on the other. The wound was infected with hospital gangrene, and the man's general health much affected. Convinced by experience of the utility of the actual cautery in this disease, M. Delpech only hesitated to apply it on account of the proximity of a large vessel; but choosing rather to run the risk of opening the artery by the iron than to see it perforated by the progress of the disease, he cauterized the whole surface of the wound, applying iron but superficially in the deeper parts. This measure had the desired effect on the local affection, and the health improved in

proportion, but on the eighth day a hemorrhage occurred, which M. Delpech satisfied himself proceeded from the brachial artery. "Under other circumstances," says he, "I should have had no hesitation in tying the artery immediately, above and below the wound, but a degree of tumefaction at the upper part of the arm, threatening a return of gangrene, made the propriety of placing a ligature there doubtful." He therefore resolved on tying the artery at some distance above the wound, even though he should be compelled to repeat the operation below to prevent hemorrhage by anastomosis. He exposed the artery between the pectoralis and latissimus dorsi muscles, below the origin of the infra-scapulary artery, passed a grooved sound and an eye-probe with a ligature under it. "Not then aware," says he, "of the dangers of ligatures of reserve, I introduced a second, and tied the first only. The wound was not brought together; the temperature of the limb sunk, and the pulsation of the radial artery ceased after the operation. On the second day the limb was as warm as the other; on the third, the pulsation of the radial artery could be felt. Until the ninth day all went on well; about noon hemorrhage took place from the upper wound: on attempting to tighten the ligature of reserve it came away, and was followed by a jet of arterial blood, which ceased on pressure; the lower ligature was firm, and it became evident that the ligature of reserve had caused the accident it was intended to prevent. There was little time to deliberate; the assistant who compressed the subclavian artery felt fatigued, and M. Delpech determined to tie the axillary. He made an incision in the groove below the clavicle, which separates the pectoral from the deltoid muscle, cut through the pectoralis minor, near the insertion, passed his finger under the brachial plexus of vessels and nerves, raised them to the surface of the wound, passed a single ligature under the artery, tied it, and brought the edges of the wound together. The circulation of the limb was restored, but the patient died ten days after the last operation. On dissection, the artery was found obliterated below and above the original wound, as far as the first ligature; in the situation of the ligature of reserve the artery was cut through, and still pervious. The ligature on the subclavian was evenly applied, had cut through the two inner coats, and a coagulum was found immediately above it.

In the second case, hemorrhage was the consequence of hospital gangrene, after amputation at the shoulder joint. M. Delpech's assistant, Dr. Galtié, tied the subclavian artery at its passage over the first rib. The patient, much reduced, died in three days, and dissection showed that the axillary artery had been perforated by ulceration, the subclavian being rendered impervious by the ligature.

In the third, a slight gun-shot wound in the hand was, at the end of some months, seized by hospital gangrene, which spread to the fore-arm. A few days after the use of actual cautery, bleeding took place from the upper part of the radial artery. M. Delpech tied the brachial artery; the hemorrhage ceased, but the case, from other causes, terminated fatally. After death it was found that the artery was completely obliterated.

In the fourth case, an inguinal aneurism had not been recognized until its most prominent part gave way. A portion of the tumour extended above the crural arch, along the inner side of the iliac vessels. Obliged for this reason to pass the sound, and probe under the artery from the outer side, M. Delpech was so unfortunate as to wound it. Compressing the vessel with the finger and thumb of one hand, he passed a

second probe under it higher up, and tied it with a single ligature. Circulation returned in some degree, but eventually the limb mortified, and in ten days the patient died. The obliteration of the artery was nearly perfected, but a little below the ligature traces of the wound in the operation were evident.

In the fifth, a wheel passed over the patient's leg, and caused a comminuted fracture of both bones, with great extravasation, but no external wound. The swelling of the leg was evidently caused by bleeding from a considerable artery, and had a pulsatory motion, corresponding to the action of the heart. Uncertain what vessel might be wounded, and unwilling to amputate, M. Delpech tied the femoral artery in the upper part of the thigh, cut both ends of the ligature close to the knot, and united the wound by the first intention. The case terminated favourably; a small point of the wound opened on the 25th day, gave issue to the ligature, and closed on the following day.

Case 6.—In this an aneurism of the femoral artery arose, fifteen days after a wound by a small sword, and a week after it had healed. The pulsation was obscure but sensible. M. Delpech passed a single ligature round the femoral artery, immediately below the groin, with the happiest results; the tumour diminished, and the patient soon recovered.

Case 7. In July 1815, in some disturbances at Montpelier, a man who had formerly been wounded severely in the right leg, was struck in the same limb by a gun-shot, which broke both bones. The extent of the injury was such, as to render amputation necessary. It was performed below the knee, and all proceeded well until the seventh day, when bleeding took place, evidently from the popliteal artery. M. Delpech tied the femoral artery immediately above its passage under the sartorius. The hemorrhage ceased, the progress of the case was favourable, and the patient speedily recovered.

Case 8. On the same occasion another man was severely wounded in the left thigh; there were three large openings in the soft parts, and except at its extremities, was shivered into many fragments. The patient and his friends obstinately resisted the proposal to amputate. It was not until the 4th day had elapsed that the severity of his sufferings induced him to change his determination. On the 16th day after the operation, a bleeding took place to a considerable extent. M. Delpech immediately tied the femoral artery just below the crural arch. The patient, from the effects of fear and debility, remained long in a dubious condition, but in the end recovered completely.

The histories of the cases are succeeded by considerations on the most remarkable circumstances in them, of which we shall attempt to give an abstract.

"The first of these cases," says M. Delpech, "suggests some important remarks on the effects of ligatures of reserve. In the present instance, the employment of this measure was unquestionably the cause of the ulceration of the artery and of hemorrhage. Although the danger of the practice has been denounced by Scarpa and other writers, "yet," adds he, "many surgeons in Europe still commit the same error that I, at that time (1814) did." It is a pity that M. Delpech's candour did not extend a little farther, and lead him to confess that the danger of the practice had been long recognized by English surgeons, and that France is almost the only part of Europe in which it continues to be employed and recommended even to the present day. It is impossible indeed not to notice a studied silence, as to the labours of our countrymen on this subject, which they have so diligently and successfully cultivated.

(To be continued.)

Some Account of the Professional Writings
Of the late WILLIAM HEY, Esq.

(Continued from p. 181.)

In the chapter of dislocations, the author gives an account of these accidents, when the os humeri, the os femoris, the lower jaw, and the thumb, are the subjects of this injury. The symptoms and treatment of the displaced bones are related with much perspicuity, and are illustrated by some curious, and well-selected cases. From Mr. Hey's experience it would appear, that a dislocation of the head of the os femoris into the foramen ovale, or "forwards and downwards," is a rare occurrence. He says, "thirty years had nearly elapsed after the opening of the General Infirmary at Leeds, before any patient was brought to it with a dislocation of the thigh forwards and downwards. Nor had I, during a period of thirty-eight years, seen that accident in my private practice." Sir Astley Cooper, in his most able and useful work on dislocations, has not mentioned the comparative frequency of its occurrence in his extensive practice; but, from the small space which is allotted to it in the Surgical Essays, it may be presumed that it was seldom presented to the notice of this eminent surgeon. The principal purpose for which these remarks are introduced here, is, to present to the young reader the following incidental observations. "Though I had," says Mr. Hey, "never seen the disease, yet I had carefully considered it, and had determined to act when called upon, according to the method laid down by Dr. Kirkland," &c. The habit of arranging in the mind the most eligible mode of proceeding in the treatment of difficult and uncommon cases, according to the best information which the state of surgery at that period admits, is pregnant with the most obvious advantages. The surgeon, whose mind is thus prepared, is in a capacity of contemplating the accident without confusion or agitation: his judgment will be formed quickly and with decision; he will adopt without hesitation, or delay, and execute with correctness and promptitude, those measures which have been the result of so much previous thought and deliberate consideration.

The eighth, ninth, tenth, and eleventh chapters, contain a description of "internal derangement of the knee joint; of loose cartilaginous substances in the joints; of wounds of the joints; of compound laxation of the ancle joint." They consist very much of interesting cases, and are enriched by a variety of important practical observations. The twelfth chapter treats "on retention of urine." Mr. Hey, in premising some account of the circumstances and symptoms attending the retention of urine, observes, that "a morbid retention of urine sometimes subsists when the patient can make water with a stream, and discharge a quantity equal to that which is discharged by a person in health." On the other hand, "it sometimes happens, that when the bladder has suffered its utmost distention, the urine runs off *(involuntarily)* by the urethra, as fast as it is brought into the bladder by the ureters." He then adds, "I have repeatedly known this circumstance cause a serious misapprehension of the true nature of the disease." The former of these sources of error is met with more frequently in men, the latter in women, especially in pregnant women: yet it occurs sometimes in men advanced in years who have laboured under the ischuria vesicalis, and a mistake in these cases is commonly fatal. An inability to evacuate the bladder completely, where properly speaking, a retention of urine so as to distend that receptacle does not exist, is a malady by which old men and those who suffer from some disease of the prostrate gland, &c. are not uncommonly distressed. This state of the bladder is easily de-

tected by introducing a catheter immediately after the patient has discharged his urine; and the remedy or rather the method of relieving the symptoms connected with this disease is, obviously, the introduction of the catheter at regular periods. In some cases it may be proper to leave the catheter in the bladder, that the patient may relieve himself as circumstances may render it expedient. Of the ischuria renalis, Mr. Hey observes, "I have seen but a few cases. The disease proved fatal in all my patients except one, in whom it was brought on by the effect of lead taken into the body by working in a pottery. It subsisted two days during a violent attack of the colica pictonum; and was then removed together with the original disease." There are many cases on record of the ischuria renalis, but the writers have not, in general, given a very perspicuous account of the disease; nor have they commonly distinguished the idiopathic malady from the symptomatic. It occurs sometimes in fever, when the intestinal canal is obstructed, and in these instances, the relieving of the bowels is soon followed by the removal of the complaint. A similar remark is applicable when the ischuria is connected with hysteria, and certain spasmodic affections of the abdominal viscera, &c. the duration of the disease being, under these circumstances, dependant on the continuance of another disorder. But when it is derived from inflammation and suppuration of the kidneys; from the presence of extraneous substances obstructing the descent of the urine into the bladder, as calculous concretions, hydatids, viscous matter filling the pelvis of the kidney, &c. or from paralysis, and a morbid change of structure in the secreting organ, or from mortification, the prognosis is more unfavourable, the distemper commonly terminating fatally in about a week. It is well known that one kidney will sometimes supply the office of both, and the functions of the urinary organs proceed without any material disorder of the health, although the other kidney may be incapable of secreting urine: yet it is not less certain, that when one kidney is suffering very seriously, the other will sympathize with it, and a complete state of ischuria renalis be the consequence. From the manner in which the late Dr. Heberden has expressed himself, it is probable, that he had seen many of these cases in the course of his long and extensive practice; and he remarks, that under the several modes of treatment which are there enumerated, "the distemper has ended happily. But, on the other hand, all these remedies have in some cases been tried without success." Sir Everard Home in his first volume of his practical observations on the treatment of diseases of the prostrate gland, has published four cases of the ischuria renalis, three of which he examined after death. He has given an account of the dissections, together with some interesting remarks on the morbid appearances and on the similarity of the symptoms which attend the retention and suppression of urine, when the maladies prove fatal. The patient under Mr. Hey's care who recovered, was relieved from his suppression of urine when the intestinal canal was freely evacuated, and the only instances in which the writer of this has seen a recovery, were those which were connected with the accumulation of fecal matters in the bowels. Mr. Hey has given some excellent rules and cautions concerning the introduction of the catheter, which are illustrated by apposite cases; and while he insists on the circumstances which frequently render it proper to confine an elastic gum catheter in the bladder, yet he thinks that patients labouring under a retention of urine, regain the natural power of evacuating that receptacle sooner, when the catheter is

withdrawn after each operation, than when it is permitted to remain in the bladder. No general and absolute rule can be given on this subject, and surgeons are sometimes obliged to consult expediency when distance, or other circumstances, render a very frequent attendance impracticable. In those cases where an irritable bladder solicits an evacuation of the urine every hour or two, it will be more advantageous to leave the instrument in the bladder: whilst in a retention of urine accompanied with a torpid bladder, not requiring the operation more frequently than once in eight or twelve hours, the repeated introduction of the instrument will promote the more speedy restoration of the natural action of this viscus.

(*To be continued.*)

OBSERVATIONS *on* FRACTURES *of the* NECK OF THE THIGH BONE. *By* SIR A. COOPER, BART, F.R.S. SURGEON TO THE KING, *&c. &c &c.*

(Continued from page 178.)

'*The treatment which ought to be pursued in fractures of the upper part of the thigh-bone.*

'In fractures within the capsule, the limb is to be placed over a pillow, bent under the knee, from a fortnight to three weeks, until the inflammation in the joint, and the irritative fever have subsided; and when the patients are able to rise, the sooner they use the crutches the better, because more quickly do they recover. They are to bear gently on the foot at first, and gradually more and more until the ligament becomes thickened and the muscles increased in their powers, so as to enable them to walk with a stick: a high-heeled shoe is next advised them, by which the hurt is much diminished; and then, if the person be not of great weight, the stick may be discontinued.

'In fractures of the neck of the bone external to the ligament, when the cervix is thrust into the trochanter, the mode of treatment consists in placing the patient over the double inclined plane,* and a band or girt is to be buckled around the pelvis, over the trochanter, to keep it pressed towards the neck of the bone; and thus they are held together until union is effected. I have, however, seen these fractures, when the girt is applied, do equally well in the extended position of the limb, as when placed over the double inclined plane, and in this respect I generally consult the patient's feelings.

'In fractures of the trochanter major a different plan must be pursued:—in this case, when the person is recumbent, the broken trochanter of the shaft will be found to have separated from the trochanter of the neck of the thigh-bone, and it is necessary to place a thick leather pad under the trochanter, to keep it elevated, so as to approximate the broken portions, or the bone will not unite. In Mr. Harris's relation of Mr. B——'s case, near Reading, not the least union was produced until this mode of treatment was adopted, although he had been kept in bed from July 20 to September 11.† I agree with an author that the fœces should be easily removed, and that a portion of the mattress should draw out for that purpose; and this is readily done in any common bed.

'I now come to the author's proofs that fractures of the neck of the thigh bone unite by bone.

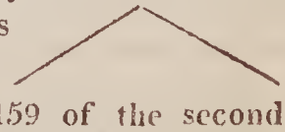
'The first is the following, p. 95—

"By dissection also, I have proved that "union has taken place within the cap- "sule, and that so firm and rigid as to be "inseparable even after maceration, and "which required boiling for a considera- "ble time before it could be overcome.

"The following are the particulars of "the case in which this occurred:—One

---

* This can be easily made with two pieces of a board, thus by any carpenter.



† See Case, page 159 of the second edition of my work, and plate 30 for the bandages used.

" of the nurses belonging to the hospital, " (St. Bartholomew's) aged 74, was knock- " ed down in the street by a horse, and " fractured the neck of the thigh-bone, in " the year 1808. She was an old emaci- " ated woman, and very much addicted to " drinking. I did not attend her until " nearly three weeks after the accident, " when I found the limb retracted and " foot everted. Very little attention had " been paid to her during this interval. " By gentle and continued exertion I drew " down the limb nearly to its proper length " when a very evident crepities was per- " ceptible. The limb was maintained in " this situation by means of a splint, of a " peculiar make, which I had constructed " for cases of this description, and which " I shall mention hereafter. The patient " was placed on a double bed, which ad- " mitted of her passing her motions with- " out moving the pelvis. She was kept in " this position for seven weeks, when the " apparatus was removed. She had an " old ulcer in her leg, which the peculiar " construction of the splint admitted of " being dressed daily without inconve- " nience. She was allowed to move the " limb about in bed, and at the end of a " week was permitted to rise for a short " time. Considerable œdema of the leg " took place, the wound became irritable, " and erysipelatous inflammation spread " up the limb, and eventually carried her " off: she died exactly thirteen weeks " from the receipt of the accident. On " examination two fractures were found; " an oblique one extending through the " greater part of the trochanter major, " which was split into two portions, and " reaching to the trochanter minor: the " other, a transverse fracture within the " articulation. Both of these had very " firmly united, as it was believed, by " bone; *but as much discussion arose out of* " *the case it was submitted to the test of* " *boiling, when the union became loosened.* " Prior to which no force that was ap- " plied could move one portion from the " other. The obliquity of the neck was " lost in this case, and the limb shortened " about three quarters of an inch. Had " the patient lived for some time longer, " there is every reason to believe that the " union would have been still more conso- " lidated."

'Here then we see a case supposed to be united, about which disputes arose whether it was united or not, and at last by boiling the bone it was proved that the bone separated, and that, consequently, *it was not united by bone.*

The next case of Mr. Earle's is from a Mr. Erndleus,* a Dutchman, p. 97, of which he has given the description: whereon Sir A. remarks —'How hard a man must be driven for his proofs, when he builds his opinions upon such a person as this.'

(*To be concluded in our next.*)

MR. AVERILL ON OPERATIVE SURGERY, *pp.* 172.

Although the work alluded to may possess neither much of novelty nor of originality, it certainly is not without its claims upon the attention of the junior branches of the profession, either as a manual in the dissecting room, or as a book of occasional reference to refresh the memory when called to operate on the living subject. Mr. A. has not occupied much of his work on useless disquisition, but has entered upon and continued his subjects with as much brevity and perspicuity as the nature of each would admit.—The author, it appears, has studied under Mr. Lisfranc, an eminent operator of the hospital of La Pitié, Paris; and this accounts for the strong predilection he evinces in favour of French surgical tactics.—We shall lay some of these before our readers, as they constitute, to the English surgeon, by far the most interesting part of the work.

Œsophagotomy.—When any foreign substance is lodged in the œsophagus that can neither be withdrawn by the fingers nor forceps, nor pushed onwards to the stomach by the probang, but continues to prevent deglutition, and by its pressure on the back part of the trachea or larynx threatens suffocation, an operation for its removal becomes requisite, which M. Lisfranc recommends to be thus performed.

The patient should be seated in a chair, with his head reclining backwards on the breast of an assistant;

* "Relatio Itineris Anglic et Batav." p. 86.

the operator placing himself in front, takes the scalpel or bistoury, and holding it like a pen, commences his incision on the inner border of the left sterno-mastoid muscle, opposite the superior edge of the thyroid cartilage, and continues it down to the lower edge of the crycoid. An assistant now draws the carotid sheath to the outer edge of the wound, to secure it from the knife, while the operator, cutting carefully through the cellular tissue, exposes the œsophagus, where it inclines to the left side from behind the trachea. A canula with a grooved stilet, or the *sonde à darde* formed like a female catheter, but considerably longer, is to be passed by the mouth down the œsophagus, inclining its point to the left side, which causes it to be readily felt from the external wound. The stilet is now to be pushed forwards through the coats of the œsophagus, when the operator feels with his finger along its concave edge, to ascertain that no large arterial branch be situated on it, and then passes a bistoury into the groove, which directing it onwards opens the œsophagus. He now feels for the foreign substance, which is to be extracted by a pair of dressing forceps passed along his finger.

During the operation, an assistant should carefully sponge away the blood after each cut of the knife, and should any arterial branch be divided, though little hemorrhage followed, it should be immediately secured, or it would render the operation much more tedious and obscure. The edges of the wound are to be approximated and a light bandage applied. The patient is to be kept at rest, and no nourishment given him by the mouth for a few days, but his strength must be kept up by nutritious clysters.

Removal of a part of the inferior Maxillary Bone.—This operation has been performed with complete success by M. Dupuytren, Surgeon to the Hotel Dieu in Paris : the whole of the chin was the part taken away. I am not certain as to the nature of the disease for which the operation was had recourse to ; but it appears that it may be required for exostosis, necrosis, or a cancerous affection of the bone. Each of these diseases would, perhaps, call for a slight variety in the operation, according to the circumstances of the case.

The following is the method in which M. Lisfranc recommends it to be practised on the dead subject.

The body being placed on its back, with its head lowered and chin elevated, an assistant takes hold of one side of the lower lip between his thumb and fore-finger, while the operator, standing behind the head in like manner, fixes the other. An incision is then made from the middle down to the os hyoides ; if it be only the chin that is to be removed this cut will be sufficient, but if a larger portion be to be taken away, another will be necessary, made along the anterior part of the bone so as to form a cross. The skin, which adheres firmly, is to be dissected back on both sides, and the bone denuded, by dividing the periosteum with the knife, at the part to be sawed through. M. Dupuytren directs the periosteum on the posterior part of the bone to be cut, by thrusting the knife upwards behind it, and turning its edge towards the bone ; but M. Lisfranc objects to this, as it may probably wound vessels which, in the living subject, would furnish considerable and even dangerous hemorrhage.

The saw is now to be applied, and the bone, being steadily fixed by an assistant, sawed through obliquely, that it may come in perfect contact with its opposed portion, which is to be cut through at the corresponding point. In order to avoid the wounding the nose or upper lip while sawing through the bone, those parts should be shielded from the teeth of the instrument by a pad of soft cloth.

The division of the bone being effected, its separation from the soft parts is to be completed with the knife. The hemorrhage produced by such an operation on the living subject, should be suppressed by drawing out the tongue, seizing with a tenaculum such arteries as can be detected, and securing them with ligatures, after which, if blood still continues to flow from invisible sources, the actual cautery is directed to be applied. The extremities of the bone are then to be placed in perfect coaptation, and the edges of the wound brought into contact; pads of lint are to be placed so as to produce compression, and the whole kept together by a roller judiciously applied. Previous to the operation it will be requisite to extract one or two teeth on each side, at the part where the bone is sawn through.

Puncturing the Pericardium.—M. Boyer, in his Traité des Maladies Chirurgicales, observes: when without swerving from the path of prudence it is thought necessary to perform this operation, the method recommended by M. Skielderup, Professor of Anatomy at the University of Christiana in Norway, should be preferred, it being less hazardous than any other. It consists in making a crucial incision through the integuments, removing a portion of the sternum by means of the trephine, and then puncturing the pericardium. The operation is directed to be performed, immediately below the part where the cartilaginous portion of the fifth rib unites with the sternum. Here the approximating layers of the two pleuræ leave an intervening triangular space, which is part of the anterior mediastinum, situated a little more to the left, than to the right, and which is filled by cellular membrane; its apex rising as high as the fifth rib, its base resting on the diaphragm. Thus, after having trephined the sternum at the part abovementioned, the pericardium may be opened without wounding the pleura; consequently the chest will not be penetrated. The crown of the trephine used should be of sufficient size to leave an opening in the sternum, the dimensions of which will admit the left index finger; this finger at the same time that it discovers the part at which fluctuation is most discernible, serves as a conductor for the bistoury, with which the pericardium is to be punctured. After having cut through the bone of the sternum, the condensed membrane or ligament lining its inner surface, will offer considerable resistance to the crown of the trephine, which should then be laid aside, and the adhesions divided by the bistoury. Should any hemorrhage follow, the operation should not be continued until it has ceased. Before making the puncture in the pericardium the body of the patient should be inclined forwards.

M. Richerand has supposed it possible to perform a radical cure for dropsy of the pericardium, by making a large opening in the sternum, opposite the heart, and incising a portion of the membrane, between the layers of which he conceives the atmospheric air would be a sufficient stimulant to excite adhesive inflammation.

(*To be continued.*)

DR. SUTTON'S *Case of Sloughing Phagedæna.*

Having very lately read (says Dr. S.) an account of Sloughing Phagedæna, by Welbank, in the Medico-Chirurgical Transactions, I am willing to state a case of this kind, and its results, which had gone to a most formidable length, with some general observations on the cure of certain ulcers and ulcerations. This I do with much deference to Surgeons, as my professional occupations are not directed, nor much called to surgical cases. This case was one of those that had been connected with syphilis, and was therefore of the precise kind

alluded to by Mr. Welbank. The party was a man of about twenty-five years of age, who, at the time I saw him, was reduced to apparently the last stage of emaciation. I was sent for on account of a very considerable vomiting; and when I had seen his reduced state, and the ulcerations of which I shall speak presently, the whole gave me very little hope of keeping the patient alive for many days. He, however, seemed more rallied on the following day than I expected, his vomiting having ceased; and as the friends of the patient wished me to continue my visits, I entered fully into all the circumstances of the case. I was informed that the patient had been ill for upwards of two months. This disease first began with buboes in each groin, which had extended themselves into rapid and very enlarged ulceration. The progress of this disease was much such as Mr. Welbank describes, and the ulcers had increased by gangrenous spots coming on the edges, so as to form a continuous and meeting mass of ulcerations of very great extent. This patient had been attended by a very assiduous Surgeon, and had enjoyed the advantage of the advice of an eminent Surgeon, from London. But no effort whatever had as yet been able to place the ulcerations in a healing state, nor stop its progress. If any thing appeared to be gained on one day, a gangrenous appearance on the next was sure to destroy the hopes formed on the former. There was, when I saw the ulceration, no slough of magnitude on its surface, but the edges displayed in all directions irregular indentations, which parts had been lately so formed by small gangrenes. On inquiry, I found that a great number of means had been employed without effect, and that nothing in the general treatment of such a case remained to be done that had been attempted, and without success. The dressing, such as had been adopted, had been carefully removed night and morning, owing to the excess of discharge, and the parts carefully cleansed from all irritating matter. Under these circumstances, I felt that there could be no impropriety in proposing a plan of my own; and as the ulceration was very extensive, there was an opportunity of trying it on a part only, which I proposed to be done. My plan therefore was this, to place a piece of dry lint doubled upon half of the ulceration, fastened with adhesive straps as well as could be, and not to remove this for two days. In order to render the discharge as little irritating as possible, and to dilute it, tepid water was to be very frequently applied by a sponge or on hair, and the lint to be thus kept constantly wet; when this could not be done so regularly, poultices were to be applied, which was generally the case at night. In this way the thing was managed, and on taking off the lint in two days, we were gratified in finding the parts looking healthy and in a state of healing, while the other part of the ulcerations, not treated in this way. was in a state of irritation. Thus, then, as no doubt could remain as to the preferable mode of proceeding, the last plan was adopted upon the extent of the ulceration; the whole soon healed, and the patient recovered, considering his reduced state, in a rapid manner.

"The medical treatment consisted in giving moderate doses of opium; and, after a time, a tonic bitter medicine was directed, and the bowels, as occasion might require, acted on. The diet allowed was such as was likely to support the strength, and with which it was found the stomach could deal the best.

"It now will become a question with my readers, as this plan has proved thus successful, on what principle I adopted it, materially varying as this treatment does from the usual practice? I have been long impressed

with the idea, and in several instances acted upon it, that the practice of exposing large ulcerations often to the air, as is very commonly done, should, if possible, be avoided. In a certain way Mr. Baynton's plan has shown this, as it consists in reducing the surface of the ulceration as much as possible; and for that purpose, to obtain an union of parts, he recommended the adhesive straps to be removed very seldom. Mr. Alanson's method in amputations is also of the same kind, which, by keeping the parts in contact to encourage adhesion, reduces the ulceration, after the operation, to a mere nothing. Each of these methods, however, having in view an union of parts, necessarily induced another most useful consequence — the external air was refused admission to the wounded and ulcerated parts. In the operations of nature in cases of wounds, or breaking of surface at least in the human species, we perceive an effort to cover the exposed living parts—if of moderate size, by inducing a scab; but if this cannot be accomplished, the death of the upper part of a wound or ulceration is effected, and a slough produced, thereby protecting the sensible parts underneath from the irritating effects of the external air. It is for the same reason that sloughs induced by art cause much good, as for some days the living parts underneath are not exposed to the irritating contact of the external air. I am well aware that Surgeons have thoroughly understood that exposure is very irritating to ulcers; but they may have too sedulously endeavoured to keep the parts clean from irritating matter, at the expense of other consequences.

"The above case was treated by my advice upon the sole principle of avoiding exposure to the external air, with a happy result. With too little experience to decide so weighty a point of practice, but with the little I have had in this part of the healing part, I should recommend it to consideration, that all reasonable means should be resorted to to hinder the contact of external air as much as possible to ulcerations. I believe this to be often practicable to a considerable extent, by diluting the irritating matter secreted, and rendering it innocuous, without frequently removing immediate applications, and thus giving Nature an opportunity of commencing and continuing the healing process after her own fashion.—*(Med. Repos.)*

Greenwich, Sept. 12, 1823.

Case of Tumour within the Trunk of the Vena Porta, completely obstructing the Circulation through this Vessel, &c. &c. By Joseph Ward, Esq. *Member of the Royal College of Surgeons, and Apothecary to the London Hospital.*

Andrew Rafferty, ætatis thirty-five years, first applied for relief January 29th, 1822, stating, that about five months previous to that period he had felt himself very sick, without having used any exertion, and that he brought up, by vomiting, about a pint and a half of blood; since that period he had spit blood occasionally, and during last week, once or twice; he had also passed small quantities of blood by stool. His bowels were upon the whole regular; had some degree of tenderness on pressure at the scorbiculus cordis; pulse soft and slow. He was ordered calomel and jalap every other morning, and a common saline mixture three times a day. By paying attention to the state of his bowels, and by varying the treatment according to circumstances, he was discharged convalescent in the following March. A few months afterwards, he again applied for relief, stating, that a short time after his discharge he became worse. He now complained of pain and swelling in the abdomen. His food was constantly returned in about ten minutes after it had been taken; this was always succeeded in about half an hour, by

very violent pain. He has frequent craving for food; abdomen distended with fluid; legs occasionally much swelled; bowels costive; urine very high-coloured; skin has been yellow; pulse regular.

After his admission, he still complained of much pain at the scorbiculus cordis. Blisters, leeches, and the usual medicines, were employed without affording any relief; he appeared to be gradually sinking; large doses of opium gave him some ease from pain: he died in October following.

On examination after death, the *stomach* was found distended with a large quantity of fluid. A yellowish tumour of a pulpy feel, and about the size of an orange, was discovered in the lesser curvature internally. The substance of the stomach about the pylorus was thickened, and contained tubercles or small tumour resembling the large one. The pyloric orifice, in consequence of the thickening of the parts, was nearly impervious. In the *liver* were situated similar tubercles, pulpy, cream coloured, and of a soft, caseous, or crudy consistence. The trunk of the vena porta was filled with a similar tumour, which completely prevented the passage of any fluid through it. The gall-bladder was distended with bile. —*(Ibid.)*

HOSPITAL REPORTS.

OPERATIONS.

St. Bartholomew's, Saturday, Oct. 11.—Mr. Lawrence performed the operation of lithotomy, on two elderly male subjects: from the first, a small calculus was speedily and easily extracted;—from the second, one of more than ordinary dimensions and peculiarity of form was taken out by piecemeals in consequence of its having broken in extractive process; a circumstance that rendered this operation, although on the whole performed with considerable address, more inevitably tedious than generally happens in ordinary cases of this kind.

Mr. ——— amputated below the elbow joint.

Guy's, Friday, Oct. 17.—The operation of lithotomy was performed by Sir A. Cooper, Bart. on a male subject rather advanced in years, and a calculus, weighing some ounces extracted.—Also removed a leg, below the knee of a female, (the foot of which had been taken off by a previous operation some time back) in consequence of considerable existing irritation.

OBITUARY.

The remains of the late Dr. BAILLIE, were interred on Tuesday, (30th ult.) at Duntisborn, Gloucestershire, (where this eminent physician had for many years resided) with all the imposing solemnity worthy of such an august occasion, and due to so much departed excellence.—Among the mourners and other gentlemen present, were W. Baillie, Esq. Capt. Millington, T. Denman, Esq. Sir T. Croft, J. Baron, Esq. M.D. the Rev. Mr. Messman, and the Rev. Mr. Hughes.

On Monday, the 6th instant, at his house, in the Albany, Piccadilly, Dr. J. Noble Johnson, M.D.

TO CORRESPONDENTS.

J. J.'s communication, we much fear, must fall infinitely short of the desired effect—as, where strong antiseptic injections have hitherto not been sufficient to guard against the evil, his proposal of steeping the body, to be dissected, in vinegar, independent of the trouble and inconvenience arising out of such a process, cannot be expected to be attended with any adequate benefit—it may be worth a trial, nevertheless, with those who are of a different opinion. Still, we conceive that other and less inconvenient and better calculated means might be suggested, e. g. when it is necessary to handle putrid bodies if the hands were occasionally dipped in or kept moist with distilled vinegar—and might not oil skin gloves, impregnated with some concentrated antiseptic preparation be found of equal service. Any further communication on this important subject, we shall, at all times be happy to lay before our readers.

London:

Printed by E. JUSTINS, 41, *Brick Lane, Spitalfields.*

Published by COX and SON, St. Thomas's Street, and 39, High Street, Southwark. Sold also by Sherwood, Neely, and Jones, Paternoster Row; Simpkin and Marshall, Stationers' Court; John Cox, Berner's Street, Oxford Street; Callow and Wilson, Gerrard Street, Soho; W. Stewart, South Bridge Street, Edinburgh; J. Cameron, opposite the College, Glasgow; Hodges and M'Arthur, Dublin; &c. &c.

THE WEEKLY
MEDICO-CHIRURGICAL & PHILOSOPHICAL MAGAZINE.

No. XXXVIII.] SATURDAY, OCTOBER 25, 1823. [*Price* 4*d*.

" FLORIFERIS, UT APES, IN SALTIBUS OMNIA LIBANT
OMNIA NOS, ITIDEM, DEPASCIMUR AUREA DICTA."

M. DELPECH'S CLINICAL SURGERY OF MONTPELIER.

(Continued from page 199.)

Four of these cases relate to a question which has often been agitated and still admits of some doubts, viz. in case of an injury of a large artery, its ligature being judged necessary, should it be effected immediately at the seat of injury, or at some distance above? M. Delpech prefers the latter generally, and considers that he has proved, (in his Treatise on Surgery) that in the case of a recent puncture, wound, or rupture of a deep-seated artery, it should be tied above the injury, and even above the ecchymosis proceeding from it; that in the case of a circumscribed tumour following a wound of an artery either plan may be adopted, though the ligature above the artery is preferable: and lastly, that a vessel should be tied in the seat of injury, when the lesion of other parts is considerable, and the ends of the artery easily accessible. We need hardly tell our readers, that these precepts are in many respects wholly opposed to the practice and principles of our best surgeons. It is not to be denied, that the ligature of an artery above the seat of injury is occasionally, nay frequently successful, but we are in possession of a sufficient number of facts proving its uncertainty and hazard, to justify the rule inculcated in this country, viz. that in the case of a recent wound of an artery, or of a diffused aneurism from that cause, it is incumbent on the surgeon, if possible, to cut down to, and secure the vessel above and below the wound. We need not here give proofs; it is enough to refer to the works of J. Bell, Hodgson, Guthrie, &c.

The fifth case presents a mode of practice at once novel and bold, and for which M. Delpech allows his obligations to the example of Professor Dupuytren in similar circumstances. Farther experience is required to determine to what extent and in what circumstances it is applicable, in the mean time it affords, at least, a chance of obviating the necessity of amputation in an injury of the most serious description. M. Delpech thinks that its success would justify us in applying it in analogous cases, as for a wound of the maxillary artery in the zygomatic fossa, and even occasionally in wounds of the upper parts of the radial, ulnar, and tibial arteries. He mentions incidentally, that he witnessed a case of aneurism of the ophthalmic artery filling the orbit and raising the eye. The carotid would have been tied, if the consultants could have formed an idea of the plan of operation, and if they had known of similar cases. Sir A. Cooper and Mr. Abernethy, to whom the case (the date of which is not stated) was communicated, agreed in the propriety of an operation. M. Delpech has since successfully tied the left carotid, for the cure of an aneurism of the superior maxillary artery, which had filled the antrum, the nasal fossa, and the orbit on the same side.

M. Delpech thinks that the sixth case proves the possibility of the cure of an aneurism, arising from a wounded artery, by a ligature above the injury. This will be at once ad-

mitted when the aneurism is circumscribed, and the case has therefore no claim to originality in proving a point now well established.

The two last cases shew that hemorrhage from a large artery, in an amputated limb, may be restrained by a ligature at a point nearer the heart. If the practice be justifiable under any circumstances it is in such as these, where the extent of the artery and the number of branches below the point of injury are so inconsiderable, as to diminish the probability of bleeding from below the ligature by means of anastamosis, and where the condition of the parts must render the attempt to discover and tie the bleeding point extremely difficult; at the same time it is more than possible, that in adopting this plan, the surgeon might ultimately find himself compelled to do under disadvantageous circumstances, what he might before have effected with more ease and with a better prospect of success.

M. Delpech's opinions on the subject of the ligature of arteries are contained in the following conclusions:—

1. That ligatures of reserve should be abandoned as useless and dangerous.

2. That the vessel should be tied with a single ligature, sufficiently small to rupture the inner coats without much exertion, and yet not so fine as to produce rapid mortification or ulceration.

3. That the ligature should be placed smoothly round the vessel, without comprising any other parts, and so as to make uniform pressure.

4. That the vessel should be separated as little as possible from the surrounding parts, and therefore a small instrument used to pass the ligature under it.

5. That the surgeon should attend to the feeling, announcing the division of the coats of the vessel, as pressure short of this would be insufficient to secure obliteration, and greater might induce mortification of the cellular coat.

6. That nothing should be placed under the ligature; first, because it is useless; secondly, because a measure which effects a partial division of the coats of an artery, probably renders its obliteration uncertain; and thirdly, because the practice renders union by the first intention impossible, and deprives us of a great advantage, especially if the artery be diseased.

7. That the divided parts should be brought together so as to ensure union by the first intention, and that less with a view of healing the wound, than to agglutinate and confound together the parts about the artery, so as to effectually obliterate it.

8. That the ligature may be removed on the fourth or fifth day, taking care *to press and bring the parts again* together.

(To be continued.)

Some Account of the Professional Writings
Of the late WILLIAM HEY, Esq.

(Continued from p. 202.)

When from the impossibility of introducing an instrument into the bladder, the puncture of this receptacle becomes necessary, Mr. Hey preferred that operation in which the bladder is perforated through the rectum, to the other method of making the puncture at the lower part of the abdomen. Mr. Hey observes that this method of operating " is more easy to the surgeon, and less painful to the patient." He was not solicitous to leave the canula in the opening; yet he remarks, " this is sometimes necessary, and seldom improper." It could not be Mr. Hey's intention to give this as a rule, applicable to all cases; since a contracted bladder, a diseased state of the prostrate gland with much enlargement, a morbid condition of the rectum, &c. must render the high

operation not only preferable, but often indispensable.

The thirteenth chapter treats on the procidentia ani. It consists chiefly of four cases of that disease, in which great pain and often considerable hemorrhage were consequent on every alvine evacuation. The cure was effected by removing the elongated skin and tubercles which surrounded the sphincter ani. A fifth case of tumour in the rectum is subjoined, which protruded whenever the patient's bowels were relieved, "and he generally discharged blood at those times." This tumour was removed by a ligature which separated on the fifth day: "the hemorrhage returned no more after the extirpation of the tumour, and the young man soon recovered his perfect health." The writer of these memoirs has seen a retention of urine, of a few days' continuance, consequent on this operation. This constitutes no solid objection against it, as the bladder soon recovers its natural action. It may be also noted, that operations about the anus and especially the application of caustic to that part, is sometimes followed by the suppuration of an absorbent gland in the groin. This symptomatic bubo may be of a considerable magnitude.

In the fourteenth chapter Mr. Hey treats on the cancer of the penis. Twelve cases are recorded; and "nine of these twelve patients afflicted with cancer of the penis had a congenital phimosis." All these persons were subjected to an operation, and most of them to an amputation of the whole, or part of the projecting portion of the penis; ten of them recovered; and two, who suffered also from the enlargement of the inguinal glands, died. The successful termination of so large a proportion of cases by the operation, may excite a doubt in the mind whether all these histories ought to be regarded as examples of a true cancerous affection.

1. The germination of excrescences in great quantities, and of considerable magnitude upon those parts, is not an appearance of rare occurrence, even independently of a venereal malady; and they arise more frequently where the prepuce is contracted than in other subjects, for obvious reasons. These warty substances very often discharge an ill-conditioned and fetid matter, and admit a cure by means that would exasperate a cancer.

2. A rigidity of the internal membrane of the præputium, with a considerable thickening of the whole substance of this part attended by an offensive discharge, is not a very rare disease, epecially in the middle and declining periods of life. The removal of the morbid part of the prepuce when this change of structure exists, is always an effectual cure of the malady.

3. In all the well-marked cases of cancer of the penis which have come under the writer's observation, there has been a diseased state of some of the inguinal glands; and, notwithstanding the amputation of the penis, and subsequent healing of the wound, the disorder of the inguinal glands has proceeded to the destruction of life. He would not assert that the amputation of the penis, in a cancerous state, has never succeeded in preserving the life of the patient; but he never had the satisfaction in his own practice, or where he has met in consultation with other surgeons, to witness so desirable an event. The inguinal glands are likewise found in a morbid state in the cancer of the labium pudendi in the female; and the disease terminates fatally. The successful issue of most of the cases recorded by Mr. Hey is the strongest evidence of the propriety of the method of treatment which he adopted; but, in amputating the penis, the writer would suggest, as the result of much experience, that instead of endeavouring to preserve the skin, as in the amputation of a

limb, the operator will derive great advantage from saving as little skin as possible.

The fifteenth chapter contains a case of convulsions after strangulation. Mr. Hey shews the great impropriety of indiscriminate bleeding in cases like this, where the convulsions were clearly connected with debility, and likewise in concussions of the brain. "I think copious bleeding to be injurious during the diminished state of the vis vitæ," which immediately succeeds the injury. In concussions of the brain, I have seen great benefit arise from the warm semicupium and blistering on the head, after topical bleeding."

Chapter the sixteenth gives an account of a soft tumour in the neck of a child, containing pure blood, which was cured by puncturing it repeatedly, and discharging the contents of the sac.

Chapter the seventeenth treats on the empyema.

Chapter the eighteenth contains a case of an enlargement of the mammæ from obstructed menstruation in a girl aged fourteen years. The larger breast was removed; it weighed eleven pounds four ounces avoirdupois. After the operation she began to menstruate regularly, and the other breast gradually diminished to less than half the bulk it had acquired before the amputation of the other. It is a curious fact, that the female breasts sometimes enlarge after the cessation of the catamenia: and in one case where the writer was consulted by a lady of high rank, the breasts became firm, and were much larger than at any former period of her life, not excepting the time when she was bearing children. The breasts did not acquire an inconvenient size, nor was she molested afterwards by any troublesome circumstances resulting from this unexpected appearance.

(To be continued.)

AVERILL'S OPERATIVE SURGERY.

(Continued from page 205.)

Lateral Operation for Stone with the Lithatome Caché.—This instrument, generally employed by French surgeons, is recommended to be used as follows. The patient is to be placed, and the operation proceeded with as before, till the staff is laid bare, the operator keeping the nail of his left index finger resting in the groove. He then takes the lithatome caché by the handle, its blade being properly set, and passes it along his finger until its beak enters the groove of the staff, which is proved by making its point pass backwards and forwards along it. Now, rising, he takes hold of the staff with his left hand, and whilst he depresses it so as to make it perform a semicircle, pushes the lithatome along the groove into the bladder, and then withdraws the staff. The instrument being in the bladder is to be lifted upwards to avoid the rectum, and pressed towards the patient's right side to steer clear of the left pudic artery. These cautions being observed, and the concealed blade so inclined that in coming forth it will cut the prostate downwards and outwards, the handles are to be approximated, the blade raised, and the gland being cut as just directed, the instrument is to be withdrawn in the direction of the external wound. The forceps may then be introduced along the finger; though M. Lisfranc recommends the introduction of a grooved conductor in the form of a blunt gorget. He directs it to be passed with its convexity upwards, and when in the bladder to be reversed, and the forceps introduced along its concavity: it is then to be withdrawn in the same manner as it entered, with its concave side downwards, and the stone felt for and extracted as before.

On the Operation for Stone on the Female.—In the rare cases in which it is found requisite to perform the operation on the female,

it is generally done in the following way.

The patient being securely bound, a straight conductor or staff is passed by the urethra into the bladder, with its groove directed obliquely downwards and outwards towards the patient's left side, the back or convex part being pressed upwards in an opposite direction, in order to enlarge the caliber of the urethra. The operator, holding the staff with his left hand, passes a probe-pointed bistoury along its groove, which cuts through the urethra and neck of the bladder in the first named direction. He then withdraws the instruments and introduces his left index finger to feel for the stone, which having found, he passes his forceps, his fingers serving as a director, and extracts as before.

M. Lisfranc recommends the incision through the urethra and neck of the bladder to be made upwards, inclining it slightly to either side to avoid the symphysis pubis. By making the cut in this way, he says, incontinence of urine is not so frequent a consequence of the operation as when the urethra is divided downwards and laterally. Should the opening be not sufficiently large to allow the stone to pass, he directs another incision to be made downwards, and a little inclined to one side, by which means the largest calculus the pubes will admit, may be extracted.

(*To be continued.*)

SULPHATE OF QUININE.

The febrifuge power of the sulphate of quinine from the account of D. I. H. Dickson, M. D. Clifton, appears to be a valuable remedy in intermittents, &c. by whom the following cases are furnished:—

"The first was that of my youngest daughter, Rose, nearly five years of age, who had been ill for more than a month, and was much reduced by repeated attacks of fever. Her disease at first assumed the character of the infantile remittent; and appeared to depend upon a disordered state of the bowels, which were so torpid as to require the powerful and continued exhibition of purgative medicines. After, however, this state of the alimentary canal had been corrected, the fever still continued to recur, but under the tertian, and latterly the quotidian type, with morning paroxysms, which lasted until the afternoon, and having the cold, hot, and sweating stages, distinctly marked. She took, in the whole, fourteen grains of the sulphate of quinine, in doses of one grain, twice a day; at first, viz. in the morning and evening; and afterwards in the morning only, some hours before the expected exacerbation. The paroxysm did not once recur after she commenced the use of this medicine: but it is proper to mention, as vitiating the conclusion, that disappointed in my expectation of receiving it from London, I had, the day previously, for the first time, given her a drachm of bark in powder, divided into three doses, and that she had escaped the usual attack of fever on the morning of its first exhibition. This was in the beginning of May, and she has not since experienced any relapse.

"The second case which occurred about the same time, was that of a girl, upwards of seven years of age, under the immediate care of Mr. Henderson, surgeon in Bristol, to whom (as it was not then to be procured here) I sent six grains of the sulphate of quinine, to be divided into as many doses. The patient had been attacked ten days before he was called in, with a quotidian intermittent, the different stages of which were strongly marked; and the paroxysm was usually of great severity, as it frequently lasted from noon until midnight. After the bowels were cleared, she took an emetic in the morning, a short time before the expected accession, by which the fit was considerably mitigated and shortened; but on the following day it returned at ten o'clock, which was two hours earlier than usual, and with great severity. As this anticipation of the paroxysm was unexpected, she had taken the first dose of the sulphate of quinine only two hours previously, and apparently without any effect. On the succeeding morning, however, she took the powder earlier, and escaped the paroxysm altogether; and it was repeated three mornings successively, with the same favourable result, when it was discontinued. In about ten days afterwards, she had a relapse, arising, there is reason to believe, from over-fatigue and insolation. After the paroxysm was over, her mother gave her the only remaining powder; and since that period, she has had no return of fever.

"The third instance in which this remedy has been tried, was also a girl, who had been subject to febrile paroxysms for several weeks, generally coming on every other morning, and declining about noon, but milder than in either of the preceding cases. On the intermediate days, she appeared to be in her usual health; but she was evidently thinner than formerly. I directed her to take a dose of calomel; and to have five doses of the sulphate of quinine. According to her mother's report, the fever was milder on the day on which she commenced the medicine; and it did not afterwards return, although I found, that altogether, she had taken only three of the powders, each of which consisted of one grain of the sulphate of quinine, mixed with sugar."

"A medical friend here, to whom I mentioned the recovery of my little girl, has exhibited this salt with similiar success in the case of his son, who returned from college, some weeks ago, affected with a tertian intermittent. During three days he took three grains of it thrice; and afterwards one grain twice a day, for the same period; and he had only two paroxysms of ague after he commenced the use of this remedy.

Dr. D. has also prescribed it with much benefit as a tonic and stomachic, in some other cases, and one great advantage it possesses is the smallness of the dose; for it is no small objection to the administration of bark in substance, especially in debilitated habits, that it frequently proves heavy and offensive to the stomach; but his experience he admits, is yet too limited to allow him to speak decidedly of its utility in other diseases. Mr. Brodie, observes, in a letter to Dr. D.—"I have seen the sulphate of quinine exhibited several times, and I believe it to be a very useful addition to the pharmacopœia." These trials, limited as they are, coincide with the reports which have been already published, of the febrifuge powers of the sulphate of quina, and they induce us to entertain a very favourable opinion of this medicine in fevers of type, as well as in other diseases, evincing a tendency to periodical recurrence; and in fine, as a tonic generally, wherever the bark itself may be administered with propriety. If, then, adds Dr. D. this saline preparation of it shall be found to answer the purposes of cinchona in substance, it is unnecessary to enlarge further upon great advantages of the minuteness of the dose of a few grains, particularly for children; and indeed, as has been already observed, in all cases where the powder of bark would be nauseating and oppressive to the stomach.

It happens still more frequently in tropical countries, that this organ is weakened, and rendered more irritable by the effects of climate or disease; and there, also, in those fevers in which the use of peruvian bark is admissible, as well as in other disorders, where it may be indicated; yet where the gastric irritability is such as to preclude its employment, it may be fairly presumed, that the sulphate of quinine will prove to be a valuable acquisition.

Three Cases of Chronic Pneumonia. By M. Gerard.

1. A young woman, aged 20, born of a father who died phthisically shortly after her birth, exhibited from her youth all the signs of a schrophulous constitution, and great nervous debility; had for four or five months before the 5th of February, 1822, experienced a harassing cough, most troublesome during the night; her sputa were purulent; her skin of a pale yellow tint; appetite almost natural; the sound given from percussion of the greatest part of the chest very flat. She was put upon barley water and milk for nourishment, and thirty leeches were applied to each side of the chest beneath the clavicles. An hour after their application she had faintings, convulsions, and delirium, which lasted four or five hours. The bleeding from the leech bites continued for eight hours, when having stopped spontaneously,

a large warm poultice was applied over them, which renewed the hæmorrhage for some hours longer. The same rigorous diet was continued till the 9th, when some little addition was made to it; and the poultices and ptisan were continued till the 21st; during which time her appetite and strength returned, and she had only one fit of coughing after the application of the leeches. On the 23d she set out for the country in a state of complete convalescence, and returned on the 2nd of March to Paris to resume her occupation, where she has ever since enjoyed perfect health.

2. A young man, brother of the preceding, aged 23, contracted a severe catarrh in January 1820. For some time after his nights were passable, but the least fatigue caused fits of coughing; his skin was usually moist; he drank warm milk, barley water, a soothing syrup, and had a blister to the left arm without much effect. On the 6th April, his strength and appetite were reduced; his tint a pale yellow, except an occasional vivid flush on the summits of the cheeks; his cough was strong, frequent, and followed by purulent expectoration; his pulse full and feverish; his condition excited painful reflexions in his mind; and, in fine, percussion gave a dead and flat sound in almost the whole of the left side of the chest. On the 7th twenty leeches were applied to the chest and the bleeding promoted by warm poultices, and for drink he was ordered water gruel; in the evening the pulse was accelerated. The cough was only slightly diminished. On the 15th, thirty-six leeches were applied, and the fits of coughing were much relieved, without altogether disappearing. Till the 10th May, the symptoms gradually diminished, when he was sent to the country and enjoined a milk diet, when he gradually recovered his strength and appetite, though he had still two or three fits of the cough during the day. His nights were excellent. On the 20th June, he was able to perform a small journey; and he now took regular exercise on horseback, which together with ten or twelve drops of the hydro-cyanic acid, daily, for a slight cough now esteemed habitual, brought, in the space of a month, his health into a state "*qui ne pouvait que faire envie.*" He married a short time after and has had no relapse.

3. In January 1820, Mademoiselle G——, aged 19, of a delicate constitution, had been subjected for a long time to cough and a feeling of suffocation, which prevented her from sleeping, and which was often followed by syncope for some hours. She was bled largely from the foot, but as the weather was excessively cold at the time, she was attacked with an intermittent fever, arising doubtless, says the narrator of the case, from the debility of the cutaneous system, which the bleeding had caused. She had a drachm of the powder of kino and an antispasmodic potion daily, and on the 27th her health was re-established.

On the 8th May she complained of severe pains at the epigastrium, a small dry cough; and as the menstrual discharge was irregular, ten leeches were applied to the pudenda, with the effect of restoring this discharge. On the 16th she set out for the country; her cough had disappeared, her appetite returned, in short she thought herself nearly cured; when, on the 25th, the weather having become rainy, she was seized with intense gastric and pulmonary symptoms at the same time, which were very little relieved by leeching. On the 25th ten leeches to the epigastrium were followed by a marked amendment in the gastric symptoms, but it was only towards the 19th July, that the patient's friends would permit of leeching to the necessary extent; when fifteen were applied to the epigastrium, and repeated on the

21st. On the 23d a new application of leeches was made to the back and to the left side; each application was followed by a slight alleviation; the left side was at this time the most affected, and in almost its whole extent gave a dull flat sound on repercussion. On the 26th and 28th of July, and on the 2d August, the leeches were repeated without much effect; however, being again repeated on the 6th, to the number of fifteen, the symptoms began to yield though the cough still persisted, and the winter approached, the evil of which was much to be feared. On the 30th August, moxa was burned upon the left side of the chest; and as soon as suppuration was established, a marked amendment in all the symptoms, gastric as well as pulmonary, followed. On the 16th October, two new issues were opened by the moxa, and on the 29th the menstruation appeared without any attending bad symptoms. Percussion of the chest now began to give a more natural sound; the appetite revived though the digestion was yet languid, her sleep was good; in Dec. the menses having failed to appear, a blister was applied, and on the 9th January, the menses appeared naturally. On the 28th, twenty leeches were required, after which she has experienced no relapse.—(BROUSSAIS *Annales.)*

The Contents of Vol. XII. part 2, *of* MEDICO-CHIRURGICAL TRANSACTIONS, *just published. (Longman, Hurst, Rees, Orme, and Brown).*

First Paper (read June 25, 1822) *is an account of Two Cases of Biliary Calculi, of extraordinary dimensions. By T. Brayne, Esq. of Banbury. Communicated by Mr. Travers.*

These cases relate to some interesting points in the pathology of the hepatic system. They offer examples of the extraordinary powers of the medicatrix naturæ, unaided by art, producing, in vital organs, most important, though scarcely suspected changes, and which, however slowly, were yet ultimately successful.

Case I.—In the latter part of November, 1822, I was called to visit Mrs. Woodward, from whom I collected the following particulars. She was fifty-five years of age, of a spare thin habit, and melancholic temperament. She reported herself to have enjoyed uninterrupted good health for years, until the last twelve months, during which she had been afflicted with an uncommon languor and prostration of strength, so as to render her unfit for her occupation, that of nursing the sick. About six months before, she was first seized with paroxysms of pain in the epigastrium, which generally commenced towards night, and continued for several hours. These attacks had returned every two or three weeks, for five or six successive times, and were for the most part, but not always succeeded by slight jaundice, which commonly soon disappeared, and left her as well as usual. The pain was seldom very severe, and she had never applied for medical aid at these periods. About a month after the last attack of pain, she became the subject of continued fever. At this (Nov. 26, 1820) I found her labouring under the following symptoms—a small quick pulse, a foul tongue, anorexia, almost total privation of sleep, constipated bowels, scanty secretion of high-coloured urine, and great mental irritability, almost amounting to complete alienation. She suffered no local pain whatever. In this state she continued with little or no variation, until the 29th of October, when she was suddenly seized with severe pain in the left iliac region, accompanied by considerable tenderness on pressure. This urgent symptom continued unmitigated for sixteen or eighteen hours, after which she became suddenly easy, and soon a natural alvine evacuation, which contained a calculus of extraordinary size. This was fol-

lowed in a short time by an abatement of the febrile symptoms, but she remained in a state of low muttering melancholy for some months, from which she did at length recover, under the gentle and long continued influence of mercury on the system.

"The calculus resembled a pigeon's egg in form, but was perhaps rather larger and more flattened. It was of a light yellow colour, variegated with brown, and had very much the appearance of an aggregation of solid particles of spermaceti. The surface was rough and tuberculated, and some of the largest elevations were situated longitudinally. On being broken it exhibited a radiated and shining fracture throughout the facettes of the radii, meeting in the centre, and having here and there interposed between them minute portions of a brown friable matter, particularly towards the middle of the calculus. There was nothing like a concentric laminated arrangement in any part of it. It possessed also the following properties: specific gravity, just exceeded distilled water. Weight (next day), 162 grs. Transverse circumference at the widest part, $3\frac{3}{8}$ inches.

This calculus, Mr. B. observes, was different from any of the biliary species he had before seen, in its wanting the laminated texture, and in containing a larger proportion of adipocire, or cholesterine, as Thenard has called it. Mr. B. was called to the same patient again in the early part of the year 1822, when he found her labouring under the usual symptoms of hydrothorax in a severe degree—the common course of treatment was adopted for her relief but without success; the urinary secretion could never be materially augmented, and she died on the 4th of March last, about a year and a half after she had voided the calculus.

Sectio Cadaveris. — Permission having been obtained to inspect the body on the second day after death, the abdomen and hepatic system became the first objects of examination. The liver was of the usual size and appearance in respect to colour, and seemed to vary in natural structure in nothing but in being rather more close and solid in its texture, and more resisting to the impression of the finger. The cystic and hepatic ducts were of the usual dimensions, but the gall-bladder itself was smaller and very much thickened, containing only a little pale unhealthy bile. It had contracted a strong adhesion about the size of a shilling to the duodenum close to the pylorus. There was no uncommon appearance of vascularity. On removing these parts from the body, a communicating aperture, large enough to admit a crow-quill, was discovered in the centre of the adhesion. The duodenum and gall-bladder were afterwards inflated from the hepatic duct and preserved. One kidney was studded with numerous flat tubercles on its cortical part. There was no other morbid appearance of any consequence except an accumulation of serum in the right cavity of the pleura, amounting to about ℥xxiv. the peculiar symptoms of which had been unequivocal for some time before her death, and were considered the cause of it.

After deciding the calculus to be of a biliary nature, it remained for theory to attempt the explanation of its passage into the intestine which is attributed to the crow-quill aperture that was discovered in the centre of the adhesion between the gall-bladder and duodenum, having once been sufficiently dilated to have allowed a passage to the calculus in question.

Case II. was a patient, æt. 65, who was labouring under a total obstruction of the bowels, and incessant vomiting and rejection of every thing from the stomach. Three drops of the croton oil were made up into two pills —one of which was ordered to be

taken immediately, and the other in four hours, if necessary. Warmth was applied to the extremities, hot fomentations to the abdomen, and occasionally a little wine. At the stated time the second croton pill was taken—the circulation of the extremities by this time, became more equable. On the following morning the bowels had not been relieved—castor oil was next given, and colocynth at intervals with minute doses of opium—towards the evening some offensive stools had been procured. Various purgatives and injections were persisted in—when evacuations more natural in smell and colour were freely passed—the figured portions were, however, observed to be very small and somewhat flattened, which gave rise to the suspicion that there might be a structure in the colon or rectum, but, in a day or two subsequent, full-sized stools contradicted that supposition. From this time the patient rapidly recovered, and was soon able to leave her bed. A few days after this period (March 11) she brought me, says Mr. Brayne, the calculus (fig. 3.) and informed me that it had come from her suddenly while sitting at breakfast that morning, and that for the two preceding days she had experienced, almost constantly, a great degree of tenesmus and straining at stool, as if from the pressure of indurated fæces, attended also with a griping pain in the abdomen, and a forcing sensation at the anus. It was now expected that the cause of these complicated ailments being at length obtained, all probability of future mischief was removed. But on the 17th of March the same train of symptoms recurred in a slighter degree, and in a few hours she passed the calculus No. 4."

The last calculus is of a singular form, being somewhat of a flat square shape, its angles rounded, and the two sides of its greatest surface considerably hollowed out, as if compressed when soft by some convex body. It is curious too that on applying the most flattened extremity of the small round calculus, (fig. 3.) to the deepest of these concavities, the correspondence gives the idea of former intimate juxta-position. It (fig. 4.) is nearly smooth and of a deep yellow colour over the greatest part of its surface. The larger one, fig. 4, weighs 176 grains. The smaller fig. 3, 159. Both swim in distilled water. The former is more regularly shaped, being something similar to half a large pigeon's egg. In composition they are thought to be of the same nature as the majority of biliary concretions, of which they possess all the external characters. They have been presented for the inspection of the society through the medium of their secretary, Dr. Roget.

Paper 2. (read Dec. 10, 1822) *is, On the Influence of Local Irritation in the production of Diseases resembling Cancer, and other morbid alterations of Structure, by* HENRY EARLE, *Esq. F. R. S. Assistant Surgeon to St. Bartholomew's Hospital, and Surgeon to the Foundling.*

Paper 3. (read Jan. 14, 1823) *On Chimney Sweeper's Cancer.—Ibid.*

Paper 4. (read Jan. 14, 1823) *On the Destruction of the Fœtal Brain, by Mr.* HAMMOND. *Communicated by Mr. Travers.*

"A young woman of the name of Atfield, having an unusually narrow pelvis, could not expel the fœtus by natural means; and it became necessary to diminish the size of its head.

"An opening was made in the scull near the fontanelle, and a portion of the parietal bone was removed; three fingers were introduced into the brain of the fœtus, the cerebrum was completely broken down, and about two ounces of brain taken out: the head and the whole of the fœtus were then quickly extracted. The child immediately cried heartily,

and breathed in a perfectly healthy manner, and with the usual apparent strength. It bled considerably from the wound in the head; a dossil of lint was applied, and kept on by adhesive plaister. This seemed to moderate but not to stop the hæmorrhage; the child passed fæces and urine, and for twelve hours the functions of life seemed to be carried on in the usual and healthy manner; the child frequently crying loudly. After that time it became weaker, cried more feebly, looked very pale, and seemed gradually sinking; for ten hours it continued in this state, during the last two it was slightly convulsed. The bleeding from the wound though not violent, never ceased, and the child appeared to die more immediately from the hemorrhage.

On examining the brain after death, the dura mater was found considerably torn, the cerebrum throughout both hemispheres torn and broken down, so as to appear a mere mass without organisation; where the ventricles should have been filled by clotted blood. The cerebellum, medulla oblongata, and spinal marrow were not injured. The child lived forty-six hours.

It is observed that this case may perhaps prove useful in a practical point of view, as it tends to shew that the removal of a part and the destruction of the whole cerebrum, does not insure death to the fœtus; and in such cases, where the head must be opened, it would be better to divide the medulla oblongata or the spinal chord; for the mother who is generally prepared for the operation by the assurance that her child is already dead, suffers considerable pain on finding it born with life but without brains.

(*To be continued.*)

HEADS OF SURGICAL LECTURES, *delivered by* SIR A. COOPER, Bart. *at* ST. THOMAS'S HOSPITAL.

Monday Evening, Oct. 20.—*Treatment of Chronic Inflammation.* "In the treatment of chronic inflammation it should always be borne in mind that the means ought to be slow and gradual; the disease should never be taken by storm—chronic inflammation is a consequence of the arrest of some secretion, *e. g.* of the liver—or, it may proceed from an affection of the mind—the secretion of the liver may be lessened—affections of the mind act upon the stomach;—ulcers of this viscus are very generally the result of continued disappointment — chronic inflammation may be a consequence of congestion by a determination to one part of the body—*e. g.* steatamous and adipose tumours.

In cases of inflammation of a chronic nature, calomel combined with opium is an excellent medicine, *e. g.* in Iritis, which is an inflammation of the iris, or continuation of the choroid membrane of the eye, this has been known to remove an opacity of the cornea in consequence of it —the dose is from grs. iij. to v. of calomel; and opium gr. j.—in a female of delicate constitution, the dose may be two grains of the former to one of the latter, twice a day for ten days or a fortnight, which often subdues an inflammation of this nature that otherwise would lead to the loss of sight. As soon as the calomel affects the mouth it should be discontinued,—the effect being produced by the first action of the mercury rather than by its action upon the salivary glands.

" The pil. hydrarg. submuriat. comp. is a valuable remedy in chronic inflammation,—by combining a mercurial with a perspirable medicine, it carries off local congestion, by acting upon the secretions of the intestinal canal and skin. The oxymurias hydrargyri is also an excellent medicine in this species of inflammation, given in the proportion of gr. $\frac{1}{8}$, in half a pint of the compound decoction of the sarsaparilla. It is also given in spirits of wine with an excellent effect.

Case—A girl from Sheerness came to the hospital with chronic inflammation of one eye, having lost the sight of the other from the same cause. She was about to return without having received much benefit, when she was ordered the oxymuriate of mercury in the sarsaparilla decoction—the result was, the inflammation was lessened, the opacity of the cornea removed, and the girl returned home with the health and use of her eye.

"In children mercury is not so frequently successful. With themthe hydrargyrus cum creta is the best preparation of this mineral, in the proportion of from one to two grs. with three grains of rhubarb—this is one of the mildest preparations of mercury in removing the diseases of children. Sir A. also remarked that he has been in the habit of giving the oxymuriate to children according to the following formula, viz. hydrarg. oxymuriat. gr. j.—Tinct. Bark, ℥ij, a tea-spoonful three times a day in some bitter decoction, for instance—that of chamomile flowers — this an admirable remedy in diseases of the mesenteric glands, disorders of the stomach and intestines, scrophulous complaints, &c. This combination of the oxymuriate with the cinchona is said to deprive the former of a portion of its medicinal efficacy by a certain degree of deoxydizement taking place—but this Sir A. observed was not sufficiently ascertained to induce him to alter his opinion of it. The hydrarg. c. creta with soda is another very excellent remedy.

"In children, mercury in many cases is not at all times a desirable medicine—here rhubarb and the carbonate of iron should be given in the proportion of two or three grains of the former with six grains of the latter twice a day, in scrophulous affections, &c.

Local Treatment of Inflammation—Sir A. hoped that all were aware in what inflammation consisted, viz. in an increased action of the circle round the inflamed part, and a dilated state of the vessels in it.

"Cold is not a positive but a relative quality—it acts by diminishing heat. It acts in two ways—1st. by contracting the vessels that are dilated—2ndly. by lessening the action of the circle that surrounds the inflamed part, in consequence of its influence upon the heart and arteries through the medium of the nervous system. By immersing the arm in cold water, the pulse was reduced successively at the interval of an hour each time from 86 to 75 and 65 beats in an hour:—and was not only reduced in quickness but in diameter. Cold carried to excess renders the system torpid, and destroys the life of the part. The best example of this nature is exemplified in Captain Cook's first voyage, where Dr. Solander strenuously recommended his companions to resist its influence by every possible means, although he was the first himself who had nearly fallen a victim to it.

"Cold diminishes the action of the part, and produces numbness—and robs the body of its heat so that the temperature in one part is greater than in another—there is sometimes a difference of twenty degrees between the sole of the foot and the calf of the leg. Although cold diminishes heat yet it sometimes increases the action of the part, as in a case of strangulated hernia Mr. Sharp and Mr. Cline applied powdered ice for upwards of forty hours. The consequence of this was, that the parts over which it was applied became frozen and hard as ice—the circulation of the part, it is true, was restored, but inflammation succeeded, and was carried on to that extent that the place sloughed; the hernia was reduced, it is true, and thus the patient owed his life to means that were not contemplated.

"The cold applications resorted to for the reduction of inflammation are the liquor plumbi acetatis dilutus with

spirits of wine—or sp. vin. ℥j. aquæ ℥vj. — if proof spirit, rather more water may be added.

" Ice is by no means a good application for reducing inflammation where there is the least disposition to gangrene.

Sir A. made the following experiment on himself—he bared the arm to the axilla, and plunged it into snow—previous to which the pulse was about 80, in a minute it rose in the snow to 120. It might here have been expected, that instead of being raised, it would have been lowered—this was repeated several times with the same effect—the pulse was hard and thready— and gave pain from the sudden manner in which heat was abstracted. The cold bath possesses a tonic influence—in perfect health it is disagreeable, renders the person irritable, &c. but if previously irritated the influence is the reverse; and it tranquillizes the system—it sinks the pulse from 120 to 100 and 90 in a minute—it lessens the action of the heart, and the irritability with which it is quickened—diminishes the diameter of the dilated vessels as well as the action of the inflamed part, and the nervous system in general.

" The next mode of reducing inflammation is heat combined with moisture—a dry heat would increase it, but heat united with moisture will lessen inflammatory action by relaxing the fibres and diminishing its influence over the nervous system—heat and moisture produce perspiration, and thus by restoring the secretions of the part they relieve the inflammation.—It is in this way that poultices and fomentations act, the object of which is to relax the part and promote its secretions. In this manner then heat and moisture are combined for the purpose.

" The next means of reducing inflammation is by leeches, and these are used with the same view as fomentations and poultices, by diminishing the volume of blood on the part. The quantity of blood drawn by a leech is comparatively small—the bleeding should be promoted afterwards by means of hot fomentations, &c. &c. &c.

" In inflammation of the testicles the best mode is to puncture some of the small vessels of the scrotum, by which means any quantity of blood may be taken away in the erect posture—the bleeding ceases in the recumbent position, or should it continue a pledget of lint with position will stop it entirely, &c. &c. &c.

Oct. 22.—" *Treatment of Chronic Inflammation.* The treatment of chronic inflammation differs from that of the acute, by the latter requiring depleting, the former stimulant measures. In acute inflammation the object is to reduce the action of the part as much as possible. In the chronic, although we do not foment, poultice, or use relaxing means, stimulant lotions are applied—a lotion of the sulphate of zinc, &c. has the power of contracting the vessels, &c. If called to treat a chronic wound we use stimulating lotions or ointments—the liquor calcis c. calomelan —or the oxymuriashy drarg. c. liquor. calcis—a solution of the sulphate of copper is also an excellent remedy.

" The same treatment is applicable in gonorrhœa—during the inflammatory stage we deplete, &c. and afterwards use stimulants—*e. g.* the balsam of copaiva, which alters the nature of the discharge. When using lotions of the stimulating kind, the linen with which they are applied should be covered with oil skin, this keeps up a degree of warmth which adds to the stimulating property of the application.

" The next mode of treating chronic inflammation is by counter-irritation. For this purpose blisters are used—issues and setons are seldom used: experience taught their influence over diseases in the joints. Blisters are advantageous when they do not over excite the action of the sys-

tem. They are of use in inflammation of any of the internal viscera—there is an existing sympathy between the most remote parts of the body. In inflammation of the lungs and intestines, unless we apply blisters after the depleting plan we do nothing. Blistering may be carried too far or be injudiciously resorted to, where this occurs we add manifold to the disease. I have known a blister on the knee to produce as regular a rigor as the production of matter. There is another mode of treating chronic inflammation by means of tartarized antimony—this we can command; and where it ulcerates and disfigures the skin by leaving large scars, it may generally be traced to want of proper attention.

"Posture is another thing to be attended to, and is of essential service in the treatment of inflammation—although hydraulic principles are not applicable to the human machine, still the blood gravitates in as well as out of the body. For instance, if twenty of the veins of the scrotum be opened in the recumbent posture scarcely a spoonful of blood would be obtained—but in the erect one, two or three ounces might be procured—in the recumbent posture the heart beats stronger than in the erect—this is the reason why in syncope we lay the patient in the former position, in which he soon recovers. In inflammation from puncture of the finger, the hand should be raised higher than the elbow, and the elbow higher than the shoulder—the lower extremities should be used in the same way—it is folly to attempt to lessen inflammation or reduce heat of these parts without attending to this circumstance.

"Rest is the essential part of the treatment of inflammation—particularly in that of the joints, and when it exists in the muscles and tendons—this step is pointed out by nature herself—for when inflammation exists in the joints in any considerable degree, the muscles refuse to obey the will.

"Diminution of the determination of the blood to parts is effected by pressure, which also, at the same time, has the power of influencing the absorbent vessels. Electricity and mercury also excite the absorbent system.

"Mr. Grosvenor of Oxford has acquired much celebrity by using friction in diseases of the joints, after inflammation is suspended, &c. &c.

On the Adhesive Inflammation—For a knowledge of the theory of adhesive inflammation we are indebted to that luminary of the profession, the late Mr. John Hunter.

"Adhesive inflammation has a disposition to separate the constituent parts of the blood. Blood coagulates and divides into serum and crassamentum. The blood is composed of three parts; viz. serum, fibrine, and the red particles which fall principally to the bottom of the coagulum—to exemplify this, if you put a portion of blood, just drawn, into rectified spirits of wine, you will see it become hard on the surface, but not on the under part, which is composed of the red particles and which are easily separated. The cellular membrane and pleura are very liable to this species of inflammation. On the surface of wounds the adhesive effusion is poured out—the uses of this effusion are, 1st. it confines the pus within the cavity of an abscess which otherwise would be productive of great destruction. 2ndly, it divides cavities into several parts, and prevents the inflammation from extending—3dly, in cases of extraneous bodies it forms a cyst round them, and prevents their doing further injury—4thly, it unites parts together which have been divided, and this is considered its most important use.

"What is this adhesive matter? It has been stated to be coagulated albumen—this, however, is not correct. It is to Mr. Dowler, formerly a

pupil of this hospital, that we are indebted to for our knowledge of it—this gentleman, from well-authenticated experiment proved it to be fibrine. He published a paper, stating it to be the fibrinous part of the blood, in the medico-chirurgical transactions. Mr. Hunter called it coagulable lymph, but this is not a good term—it is much better to say that it is the fibrine that is poured out. The serous surfaces are more prone to the adhesive inflammation than the mucous; the one takes on the adhesive, the other the suppurative process. The lining of the abdomen, peritoneum, pleura, the membranes of the brain, &c. are serous surfaces — on the commencement of inflammation, if not subdued, the adhesive process follows, fibrine is effused, and the membranes are connected to their surrounding surfaces.

The whole cavity of the abdomen is frequently obliterated and the pericardium glued to the heart; in short, on those surfaces where the adhesive inflammation is liable, traces of adhesion are always found on dissection —it is the same with the membranes of the brain. The reason why some bodies go into adhesive and others into the suppurative inflammation is obvious from the respective importance of the parts—pus in the pleura would be attended with the greatest danger—in the urethra the adhesive inflammation would be equally great.

"John Hunter has remarked that the suppurative process never takes place until after inflammation—and that no pus is ever found but as a consequence of it; yet there are particular structures which form pus, without previous adhesive inflammation—in the urethra, for instance, if any stimulus be applied, pus begins immediately to form—the introduction of a bougie will cause it to form in irritable habits of body—also in the trachea and lacrymal duct, &c.—this is a wise provision of nature, for if those parts took on the adhesive instead of the suppurative process, it would in most cases be attended with fatal consequences, &c. &c.

To the Editor of the Medico-Chirurgical Magazine.

Mr. Editor—I have been in vain for some time past engaged in endeavouring how to deprive leaves of their green part, and to retain only their fibres. If you or any of your numerous correspondents can inform me how to do this, I shall feel myself extremely obliged. In my walks I have sometimes met with leaves thus anatomized, which have appeared to me as very beautiful, but I have never been able to discover the process by which it is effected.

Croton.

CASE OF HYDROPHOBIA.

From the Journal Des Debats, Paris, October 18, 1823.

An event of the highest interest to humanity is at this moment passing at the Hotel Dieu, at Paris. On Monday evening a baker was brought to the hospital, who in the course of the day had had several fits, which a physician of Paris had not characterised. On Tuesday morning, M. Caillard, physician to the establishment found that the disorder was hydrophobia, and in fact, a few hours afterwards, the malady appeared in the highest degree: ravings, a disposition to bite, cries, aversion for every thing liquid, showed the malady in the most alarming stage. After consulting his colleague, Dr. Petit, M. Caillard proceeded to copious bleedings which had no effect on the extreme intensity of the disorder, which was such that the patient could not be expected to live two hours. M. Caillard knowing that Dr. Magendie had devoted his attention to the investigation of the hydrophobia, sent to request him to visit this unfortunate patient. Without losing a moment, Dr. Magendie, guided by his previous experiments, and with the assistance of the pupils of the hospital, *injected*

about a pint of lukewarm water into the vein of the fore arm.* This operation, which the dreadful convulsions of the patient rendered it very difficult to perform, has hitherto had the happiest effect. Half an hour after this injection, the patient recovered the use of his reason—the convulsions, the inclination to bite ceased; he was able to drink; in short, all the symptoms of hydrophobia vanished as if by magic, to the astonishment of all those who were present. It is now four days since the operation was performed; we will not yet pronounce on its final result, but every thing seems to presage that the unfortunate man will recover from the dreadful malady which hitherto had never spared a victim. The greatest interest is felt for him, and all possible care taken of him by the physicians, the nurses and the pupils of the hospital.

MELANGE.

M. Zollikofferon Stramonium in Chronic Rheumatism.—On trying the datura stramonium in chronic rheumatism, M. Zollikoffer thinks he obtained decided advantages. The following are some of the formulæ which he exhibited:—1. ℞ Seminum Daturæ Stramonii, ℥j. Spirit. vini ten. lbss. Macer. per septem dies, col. et serva.—2. ℞ Foliorum Daturæ Stramonii, ℥ij. Spirit. vini ten. lbj. Macer. per quinque dies col. et adde, Olei Pulegii, gr. xx. Olei Cinnamomi, ℥ss. Tincturi Opii, ℥j. Spirit. vini camphor. ℥ij. Misce et serva.—3. ℞ Foliorum Daturæ Stramonii, ℥ij. Axung. porci, ℥iiij. Misce et coq. leni igni, in vase fictili serva.

The first preparation M. Zollickoffer gave in the dose of from eight to eleven drops morning and evening, till the patient experienced slight giddiness, when he intermitted the medicine for some days. He employed the unguent rubbed on the skin when inconvenience arose from the internal use of the medicine.

On the Scorbutus which manifests itself in a local manner during the treatment of Fractures, and prevents their union. By M. Juleo Cloquet.—Occasionally during the treatment of fractures, all the symptoms which characterize the last stage of scurvy develope themselves in the fractured limb, and arrest for a long time, or even entirely prevent, the effusion of the fracture. This troublesome complication is sometimes an entirely local affection: at other times it first manifests itself in the fractured limb, and afterwards extends to the other organs of the body. This species of local traumatic scorbutus would appear to be produced by debilitating causes, acting directly on the fractured limb, or even in a general manner on the system. M. Cloquet, in order to prevent this affection, considers it necessary, in fractures complicated with inflammation, to be very cautious regarding general blood letting; nor does he advice emollient applications to be continued longer than is absolutely necessary for allaying the inflammation; and after this period he recommends the patient to be dressed with linen very dry and moderately tight. When the symptoms of local scorbutus have manifested themselves, the attention must be redoubled; tonics and stimulants must be given, and all the means proper in scurvy should be employed. It is also necessary at each dressing, to leave the limb for some time, exposed to the air, and especially to the rays of the sun.—*Archiv. Gen. de Med. April*, 1823.

Case of successful operation for Salivary Fistula. By Professor Beclard.—At a late meeting of the Académie Royale de Medecine, M. Beclard mentions a case of salivary fistula cured by forming an internal fistula, which latter was made by passing into the internal part of the substance of the cheek a leaden style, so as to reach the excretory duct at the part where it was interrupted. The external suture was united by the twisted suture, after having been rendered raw by excision. In this case as well as in the former which M. Beclard communicated to the Academie two years before, the cure took place without any other deformity than a small vertical and linear cicatrix.—*Arch. Gén. de Med. Juin.* 1823.

TO CORRESPONDENTS.

Heads of Sir Astley Cooper's lectures will be continued.

The Index to the first Volume of this Magazine will be delivered gratis, to Subscribers, next Saturday.

* *Une pinte*, French measure is, I think, a quart English. H. L.

Printed by E. JUSTINS, 41, *Brick Lane, Spitalfields.*

Published by COX and SON, St. Thomas's Street, and 39, High Street, Southwark. Sold also by Sherwood, Neely, and Jones, Paternoster Row; Simpkin and Marshall, Stationers' Court; John Cox, Berner's Street, Oxford Street; Callow and Wilson, Gerrard Street, Soho; W. Stewart, South Bridge Street, Edinburgh; J. Cameron, opposite the College, Glasgow; Hodges and M'Arthur, Dublin; &c. &c.

THE WEEKLY

MEDICO-CHIRURGICAL & PHILOSOPHICAL MAGAZINE.

No. XXXIX.] SATURDAY, NOVEMBER 1, 1823. [*Price* 4*d*.

" FLORIFERIS, UT APES, IN SALTIBUS OMNIA LIBANT
OMNIA NOS, ITIDEM, DEPASCIMUR AUREA DICTA."

CONTENTS OF THE MEDICO-CHIRURGICAL TRANSACTIONS, *just published.*

(Continued from page 219.)

A Case of Bronchocele. By H. Struckburgh Roots, M. D. Physician to the Carey Street Public Dispensary, and to the St. Pancras Infirmary. (read Dec. 10, 1822.)

This case goes to illustrate the advantages to be obtained from iodine, as a remedy in the cure of bronchocele.

The patient was a young lady, ætat. 19, tall of stature, with light blue eyes, fair hair, and trasparent skin, inheriting from her father a disposition to scrophula, " has had for the last two years an enlargement of the thyroid gland, which, within the last two or three months, has increased considerably, and at times occasions her a good deal of uneasiness particularly when bending the chin towards the sternum, or in singing and laughing, or upon using any considerable exertion. Both lobes of the gland are enlarged, the left rather more than the right, and upon the whole the size of the tumour may be compared to that of a moderate sized orange flattened."

Leeches were applied to the tumour twice a week, and fifteen grains of the carbonate of soda three times a day, which were continued for three months, without any material alteration being effected in the size of the tumour. The patient being unwilling to persevere in so frequent an use of the leeches, she was directed to take a drachm of burnt sponge three times a day, and to apply the leeches once a fortnight, in which plan she continued for about a month without any diminution of size in the tumour. Friction, soap liniment, and the burnt sponge were continued, which were submitted to and steadily adopted for three or four months—tumour still the same.

At length the iodine was prescribed (as recommended by Dr. Coindet) in the following proportions:—℞ potassæ hydriodat gr. xxxiv. Ceræ albæ ʒij. Adipis suillæ ℥jss. M. The size of a garden bean to be rubbed into the tumour night and morning, for ten minutes at each time. This ointment was continued five weeks. The tumour began to diminish, the iodine was increased from 34 to 44 grains, with directions to abstain from its use in case of inflammation supervening. The iodine was subsequently increased to 50, and ultimately to 56 grains, and 20 drops of the tincture were given three times a day in a glass of water—the patient recovered —the tumour disappeared.

The patient was unable to take the iodine internally, so often as three times a day, in consequence of its producing sickness and pain in the stomach and intestines; but she had continued it twice a day for six weeks and once a day for a short time afterwards, and she had discontinued the ointment for more than a month, as when Dr. Roots saw her last the swelling had entirely subsided.

Dr. R. also observes, that he has another patient under his care suffering from a considerable bronchocele but which has materially diminished under this medicine; the result of which, at a future period he will have the honour of relating to the society.

On the Dilatation of the Female Urethra, by inflation, for the extraction of calculi from the bladder, as practised in Egypt, near 200 years ago. By Robert Masters Kerrison, M. D. (read Jan. 7, 1823.)

Cursory Remarks on Small-Pox, as it occurs subsequent to vaccination. By George Gregory, M. D. Physician to the Hospital for Small Pox Vaccination, at St. Pancras. (read Jan. 7. 1823.)

On the Comparative Virtues of different kinds of Sarsaparilla. By Mr. John Pope. Communicated by Mr. Earle. (read Jan. 14, 1823.)

Case of Stricture of the Urethra, treated by incision. By James M. Arnott, Esq. (read June 26, 1823.)

On the occurrence in Persia of the Epidemic Cholera of India. By John Cormick, Esq. Communicated in a letter to H. L. Thomas, Esq. (read Jan. 28, 1823.)

An Account of a rare case of Complicated Labour, from locking of the heads of Twins: to which are subjoined notices of two recorded cases of the same description; with a suggestion of a method for effecting delivery under similar circumstances. By John Allan, Esq. Member of the Royal College of Surgeons. Communicated by Dr. Davis. (read April 8, 1823.)

"At one o'clock in the morning, on the 11th of August, 1822, I was called to Mrs. Welch, a small spare woman, thirty years of age, in her third labour, who was stated by the midwife in attendance, to have been eight hours in strong labour, with an arm presenting.

"I found the membranes entire, but apparently containing no liquor amnii. The labour had so far advanced that the os uteri was obliterated. The presenting limb proved to be a left knee, and with it the vertix of a head. I attempted to push up the knee so as to cause the head to descend, but ineffectually, owing to the powerful and paiuful contraction of the uterus. The membranes being unusually tough, and not distended with fluid were lacerated with some difficulty by the forefinger introduced between the thigh and leg, so as to hook the child's ham. The knee was then pulled down, and the head at the same time was felt to retire upwards. The body having descended, the right arm was observed to be wedged between the occiput and symphysis pubis, and was not disengaged without some difficulty after the left arm had been extracted.

"No pulsation being felt in the cord, I was proceeding, in the usual manner, to introduce two fingers of my left hand into the child's mouth, for the purpose of bringing the chin down to the breast, and hastening the delivery, when I discovered that the hollow of the sacrum was occupied by the head of another child, of which the body was still above the brim of the pelvis. The face of this second child was towards the sacrum, and its occiput was closely applied to the throat of the first-mentioned child. The back of the neck of the latter was closely applied to the symphysis pubis of the mother, and its face to the back of the neck of the child whose body remained within the uterus. With the heads thus situated it would have been impossible, even had the firm contraction of the uterus been out of the question, to have pushed upwards the one next to the sacrum, without carrying the other before it; and every attempt to extract that which was next to the pubis had the effect of pressing the other so forcibly downwards as to threaten a rupture of the perinæum. In this dilemma I was at first doubtful what course to pursue, the case, so far as then known to me, being without a parallel: but after a little consideration, I resolved upon a mode of completing the delivery, which will presently be described, and which may, perhaps, be advantageously adopted

on similar occasions in future. Owing to the smallness of the children, it proved unnecessary in the present instance, both heads having been simultaneously expelled from the pelvis by one powerful parturient effort, without any assistance from art. Both children were irrecoverably dead. They appeared to be six weeks or more before the full period. The mother had a smart attack of hysteritis, marked by intense pain and suppression of the lochia, accompanied with great excitement of the vascular system, and severe intolerance of light. Three bleedings, amounting together to 76 ounces, and free purging, with other appropriate means, removed these symptoms, and she recovered perfectly.

A case very similar to this is described in the Ebinburgh Med. and Surg. Journal, for Jan. 1822, with, however, the peculiarity that the head occupying the hollow of the sacrum had its occiput toward that bone, and the head next to the pubes had its face towards the left side of the pelvis. The nearest head to the sacrum, it is stated, was perforated to make room, if not to extract the other head entire, at least to admit of applying the perforator to it also—the latter alternative was found necessary; but even after both heads had been broken down, it was not without considerable force exerted by the operator, as well as by two gentlemen who assisted him, that the head next to the pubes was extracted. The extraction of the other child was then effected without further difficulty. The patient died of inflammation of the uterus and parts lining the pelvis, on the eighteenth day after her delivery, notwithstanding very active treatment and great attention on the part of her medical attendant.

There is also another case of this description related in the Journal de Medecine for November 1771, in a letter addressed to M. Levret, by M. Eneaux, a surgeon at Dijon, who states, that he succeeded in extracting, with the forceps, the head next to the sacrum, while the body of the other child, which had passed the os externum, was held up in the hands of an assistant over the pubes of the mother. The head of this last child was extracted with ease after the body of the other.

The writer adds, that the child he extracted with the forceps survived, though not larger than a seven month's child; but that the other died, though corresponding in size to an eight month's child. The mother recovered well. Upon examination of the placenta, Mr. Eneaux ascertained that both children had been contained in one set of membranes—for the treatment of a similar case, Mr. Allan observes, that "should a case of this description occur about the seventh month of pregnancy, the mode of delivery by the forceps, which succeeded in the hands of Mr. Eneaux might perhaps be attempted; but with twins, near the full period of gestation, such a mode of delivery, if practicable at all, would be manifestly imcompatible with the lives either of the mother or the children. I may, therefore, perhaps, be allowed to suggest for such cases the operation which, had the natural efforts proved incompetent to the delivery, I had resolved to perform in the case described above. This consists in detaching the body that had passed the os externum from the head, pushing the detached head further above the brim of the pelvis than it is already situated, and then extracting with the forceps, the head occupying the hollow of the sacrum, providing the natural efforts should still prove inadequate. After the extraction of this child, the separated head of the other would remain to be extracted with the forceps, or such other suitable instrument that might be necessary. In this manner the lives of the mother and one of the children would most probably be effectually saved;

while the life lost would only be that of a child so situated that it would appear impossible to devise any practicable method for its preservation. Its death must inevitably ensue in a few minutes, if no operation whatever were attempted from the pressure that must unavoidably be made upon the umbilical cord; so that there will be no necessity for applying a cutting instrument while the child is alive.

For the opportunity of treating this case and others, Mr. A. expresses himself as particularly indebted to the friendship of Dr. Davis.

(*To be continued.*)

HEADS OF SURGICAL LECTURES, *delivered by* SIR A. COOPER, Bart. *at* ST. THOMAS'S HOSPITAL.

(Continued from p. 223.)

October 27.—*Appearances which parts assume under the adhesive inflammation.*—When an incision is made into a part affected with the adhesive inflammation, a quantity of lymph is found effused—these parts also become more indurated, and are filled with a semi-transparent yellow fluid resembling jelly. The adhesive inflammation is best seen on the skin under the influence of a blister—in this case the effusion is the same that is poured out to accomplish the union after the operation of hare-lip. The time required for the accomplishment of the adhesive process is in proportion to the degree of inflammation. In the abdomen it takes place in 19 hours, and the intestine has in this time been glued to the internal surface of the peritoneum by means of a red line. Nineteen hours is mentioned from having witnessed a case in which it occurred within this time; viz. in Mr. Blyth who was shot by Patch. I was called to him, " says Sir A. 19 hours after the accident, and I found the intestines glued to the peritoneum, &c. On the surface of wounds the adhesive process is produced more rapidly, viz. in 12 hours. In the dog still more so; viz. in six hours. Adhesive matter becomes organised like every other part of the body. The vasa vasorum send out a number of elongated vessels. A tendon is not united completely until after a lapse of ten days. A newly formed vessel is always tortuous; and anastomosing vessels are always found in the same manner. The new vessels are formed from surrounding ones and not from the new substance. In proportion to the vascularity of the parts is the facility and rapidity with which new vessels are produced.

" There is scarcely an operation, not even the simplest, that could take place with safety, without the adhesive process. This is a principle that should never be lost sight of. If called, for instance, to a case of compound fracture, our first object ought to be to endeavour to reduce it to a simple one by promoting the union of the parts by the adhesive process. In the cæsarean section, this is the first step, and, if the adhesive process ensue the danger is removed. In the operation for cataract the same observation equally applies relative to the adhesive process, as the result in a great degree depends upon this taking place before the suppurative process is established. Also, in strangulated hernia, where if the peritoneum and intestines did not adhere, death would be the result; and in aneursim where life is preserved by the adhesive process—if this were not the case, unavoidable hæmorrhage would follow to the destruction of the patient. In hydrocele the success depends upon the adhesive inflammation taking place, where, in consequence of an injection, this process is produced, and the side of the vaginal tunic glued together so that the cavity is obliterated.

After amputation, the great object is to save as much of the integument as possible to cover the surface of the muscles which retract, and for the purpose of gluing and connecting them with their ends: here then the neces

sity of cleaning the stump of the coagula of blood that attach to it; were this step omitted the process of adhesion would be interrupted, and the consequence would be the formation of matter, resulting from the irritability produced by their presence. "The fewer the ligatures also, the better, provided they be strong enough to secure the vessels;* it is necessary only to take up the larger vessels; the very small ones will cease bleeding of themselves upon exposure or by simple pressure continued for a short time—a single round ligature, if it be strong enough, is preferable to a broad one, as these prevent the healing of the wound by keeping up irritation and ultimately bringing on the ulcerative process. Having cleaned the stump, one end of the ligature is to be cut close to the knot: and the other left hanging out. It has been recommended to cut away both ends; when this is the case, the ligature should be composed of some substance that will either dissolve in the body or will be taken up by the absorbents. Sir A. has tried cat-gut for this purpose, as being an animal substance, and, although it succeeded in the first instance, it was found on frequent repetitions afterwards, to produce suppuration. In twelve or fourteen days the ligature generally comes away of itself—the ligatures should all be brought into a line directly with the wound, and their ends left hanging out. If it be an operation below the knee no bandage is necessary to prevent the retraction of the muscles, or to prevent them from separating. But above the knee or above the elbow, a roller should be applied to keep the muscles in contact. It has also the effect of keeping all the parts together thereby promoting the adhesive process — after the roller, three pieces of adhesive plaster over the part and one or two round the stump are all that is required. The treatment some few years ago was different—lint and tow, and over all a flannel night cap used to be applied over the stump—this generated such a degree of heat about the part, that the formation of matter, as a matter of course, was the consequence. The stump now, on the contrary, is kept cool; if inflammation be in excess, a lotion of spirits of wine and water is applied to reduce it to the adhesive standard—and, if the weather be cold, it is covered with a sheet always observing the same indications.

"Nothing can be more improper, after amputating a limb, than to remove the dressings too early to see *how the stump looks, or if matter be formed*—this is extremely wrong, as such a step tends precisely to retard if not to destroy that mode which nature has set up for the union of the part: and whenever this is actually necessary, the whole of the strappings should never be removed, but the examination carefully proceeded in by removing one or more at a time, leaving one on at least to keep the parts that may already be united from separating.

What has been said with respect to amputation is equally applicable to ordinary sized wounds.

"There are two modes of union, viz. adhesion and suppuration. There is one exception only to these; and that is at the mouths of arteries where the hæmorrhage is stopped by a co-

* The principal on which an artery heals has been ably and ingeniously explained by Dr. Jones, in his excellent work in hæmorrhage. Dr. J. says, that for an artery to unite, it is absolutely necessary that its internal and middle coat should be ruptured, and this is only to be accomplished by a round and very firm ligature, drawn moderately tight on the vessel. By this means the inner coats become united by adhesion before the process of ulceration separates the ligature from the outer coat—a *broad ligature* he did not find to produce this effect. Dr. J. also observes, that the ligature may be taken away after the rupture and division of the inner coat has been effected, and still the artery will unite by the adhesive inflammation.

agulum or clot of blood—and here ultimately the union is effected by the effusion of lymph, which causes an adhesion of the clot to the inside and orifice of the artery.

" The uses of lymph are several; it confines pus in the cavity of an abcess; divides a cavity into several parts, so that inflammation is prevented from spreading, by the sides of this cavity being glued together; it forms a cyst around extraneous substances which allows them to remain in the body with impunity. Instances of encysted balls remaining in and travelling from one part of the body to the other—the great arch of the colon adhering to the peritoneum, &c. It also unites parts together that have been divided. A wrong opinion relative to the blood being the bond of union, through what has been, though erroneously, called the first intention, has been entertained—there is no adhesion but through the medium of the lymph.

October 29.—*On Suppuration.*—" Suppuration is the formation of purulent matter either as it takes place within the cavities of abscesses or on the surface of wounds. If a wound is going into a state of suppuration the constitution is very little affected. When inflammation passes the limits of adhesion, pus is formed—the symptoms are, the parts affected become more prominent—the tumour becomes more hard at its sides than at its centre—it is attended with a throbbing pain aud a suffused redness over its surface; this redness commonly denotes inflammation in the cellular membrane beneath—a fluctuation is generally perceptible in its centre which becomes the more elevated part, and appears whitish and soft to the feel—the constitution in its turn becomes affected, the patient has rigors more or less violent, succeeded by heat and profuse perspiration—the pain, which before was acute, now becomes of a dull kind—the rigors are increased in proportion to the quantity of matter formed, &c. &c. The pain attendant on adhesive inflammation is uniform, that of the suppurative is of a pulsatory positive kind.

" When suppurative inflammation takes place in a wound, it is always preceded by the adhesive process. Granulation is a mode of union where the adhesive process fails: *e. g.* if a part be wounded by any sharp instrument, and lymph is not sufficiently thrown out for its union, suppuration commences, and the wound is healed by granulation.

" Some surfaces go more readily into the suppurative than the adhesive process. On those surfaces which secrete mucus, the pus is first formed, and inflammation afterwards—on the exhaling surfaces, inflammation takes place, and adhesion follows. The urethra is one of those structures where pus is formed without previous adhesive inflammation—and this may be observed after the introduction of a bougie in a person of an irritable habit. In croup, lymph is formed instead of pus, &c. &c.

" Now what is the reason that mucous surfaces pour out pus, and exhaling surfaces coagulable lymph? Because the extreme vessels in exhalant surfaces are more minute, and will not readily admit pus through them, although they allow of lymph—whereas on mucous surfaces the vessels are larger, and pus readily finds its way.

" Pus is composed of serum and white particles similar in form to the red globules of the blood. It was supposed, till of late years that pus was formed by the destruction of the solids—but this opinion is now very generally exploded. In the urethra we have an example to the contrary. It was formerly contended that the matter discharged in gonorrhœa was produced from an ulcer—the lachrymal duct, the peritoneum, pleura, pericardium, the internal membrane of the bladder, &c. may also be instanced

—these are always found considerably thickened after the formation of matter. Dr. Hunter was the first who observed that the dissolution of the solids was by no means essential to the formation of pus.

"The formation of pus is from the orifice of the neighbouring vessels, and may be proved by the following experiment—after a sufficient quantity of fluid is raised under the cuticle by the application of a blister —and as soon as it is removed and an opening made into the cuticle, if a bit of glass be applied on the surface, after it has remained a short time it will be found similar in appearance to pus, which directly proves that it is formed from the mouths of the vessels and not from the solids. Suppuration may take place in arteries and in veins after the inflammation consequent upon bleeding, and destroy life by extending to the heart. A wound in a joint, however small, is dangerous—air has no influence in producing inflammation in a cavity—but a wound in a joint is dangerous because it is on a mucous surface—in wounds of the joints the external parts by being drawn together will heal, yet pus may form under them—matter forming in the theca lining a tendon is productive of the highest degree of irritation—where we find matter formed here, it should be cut down upon and evacuated.—Pus may be healthy or unhealthy — healthy mild bland pus has not the power of irritating the surfaces in contact with it—when healthy pus is acted upon by any irritating cause, its nature becomes changed, it then becomes ichorous, and excites irritation in the neighbouring parts.

"On a part being irritated by any poisonous matter it generates a poison similar to that which was applied—of this we have example in the matter of gonorrhœa, chaucre, smallpox, &c.

"Suppuration is not without its advantages—its first and most important is that of covering granulating surfaces, and keeping them in a moist state, without which no sore could be healed; for were a sore exposed to the influence of the atmosphere, granulation would be prevented. By exposure to air a sore becomes encrusted, under which matter forms, keeping the granulations moist—where this occurs, as it is sometimes necessary in old indolent sores to allow of encrustation to take place, the part is healed without any assistance, if the crust be permitted to remain for a sufficient length of time —In the second place, suppuration gives an opportunity for the separation of extraneous bodies—*e. g.* balls, ligatures, &c. by means of suppuration an abscess in the same manner discharges extraneous bodies.

"When the body has been long accustomed to discharge matter, it is absolutely necessary on stopping it to substitute other evacuations in its stead. Case of Mr. Wilson, professor of anatomy. When young this gentleman was frequently the subject of hæmoptœ with a tendency to phthisis —he made a sore in his arm which gave him considerable relief—when this was healed up, the hæmoptœ with the other symptoms returned, so that he found it necessary to reopen the sore by which he was benefitted—these consequences are seen in healing old ulcers—the old surgeons were in the habit of making issues in distant part of the body from the part affected with great advantage—but purgatives persevered in for some time are now deemed preferable in the generality of cases, &c. &c.

(To be continued.)

LETTEE TO DR. WALSHMAN.

Sir, — A communication having been made to me in reference to a paragraph which appeared in the concluding page of No. 28, of the "Medico-Chirurgical and Philosophical Magazine," I beg leave to as-

sure you, that whatever object the editor* had in view by its insertion, it was done *totally without onr knowledge;* and I have only to add, that such is the high opinion which I have for many years formed of your public and private character, together with the considerations of your long-continued friendship, that, as far as I am concerned, I should deem it alike an act of injustice and ingratitude to countenance any thing, which might be said or written, prejudicial to your interest. I am, Sir, your most obedient servant,

THE PUBLISHER.

St. Thomas's Street, Borough.

Case of Tracheotomy, by Mr. Liston, Edin.

The following is one of two cases of the above description that lately come under the treatment of this excellent surgeon:—

Elizabeth Thompson, ætat 8, a fine healthy child, by running across the street, fell, and struck the larynx with great force upon a large stone. She was taken up quite lifeless, and it was some time before respiration was at all established. Mr. Murray, who was first called, finding her face livid, opened the temporal artery, and applied leeches to the child's throat, with some little relief. Mr. Liston saw her about three hours after the accident. The breathing, more especially inspiration, was exceedingly difficult; and this appeared to proceed not only from the injury of the larynx, probably occasioning loss of power of the muscles, but from the collection of some fluid in the trachea, and its ramifications. The child was evidently in such a state, that unless active means were had recourse to, and that speedily, a fatal termination would ere long ensue.

An opening was made in the trachea, and the operation was followed by immediate relief. A quantity of coagulated blood, and bloody mucus was evacuated by the opening; and when the discharge and coughing had ceased, a tube was then introduced, with most marked relief.— (*Edin. Med. and Surg. Journal.*)

M. ANDRAL, JUN. ON THE MEDICAL PROPERTIES OF STRYCHNINE AND BRUCINE.

The strychnine used in the cases which follow is as pure as possible, and is made into pills containing either a twelfth or a sixteenth of a grain.

Of the former of those, one was given night and morning to a painter who had paralysis, after several attacks of colic. A sort of painful trembling was produced in the extensor muscles of the hands. The dose was increased to four grains a day, which created spasmodic contractions of the extensores digitorum: the paralysis seemed to diminish, and after a short time he quitted the hospital, having only a slight weakness left in his hands. The dose could not be exhibited to this individual without danger beyond two-thirds of a grain per diem.

A single pill, containing only a twelfth of a grain, given to a grinder of colours, with the same disease, produced a slight trismus and the commencement of tetanic rigidity in the muscles of the neck and abdomen. At the end of six days, two pills were given, which occasioned violent contractions of both arms. This dose, continued about fifteen days, completely dissipated the paralysis.

It required a third of a grain to produce any effect on a german, with

* Unconscious of any intentional offence to Dr. Walsham, we do not hesitate, though contrary to the usual routine of business, to insert the above letter.—The Editors of this Magazine and the Publisher have different duties to perform, although equal responsibility may eventually attach to both parties. But, it was to be expected, that for the explanation of anything appearing in our columns, the Editors alone would, in the first place, have been called upon. We do not however intend to suffer this solitary deviation from the usual practice, to operate as a precedent.—EDS.

a paralysis of the extensores of both hands. The dose was increased to above a grain, which created powerful contractions, so that it was lowered to a grain. No benefit occurred to this patient, but the case serves to mark the different susceptibility of patients to the action of this substance.

To a potter the strychnine was given to the extent of a grain without much effect, on passing that quantity there came on lock-jaw and retraction of the head. He would take no more pills, and went out without much benefit.

In another case the paralysis seemed to arise from lesion of the spinal marrow, and was aggravated by the strychnine.

The brucine was administered in pills containing half a grain of the alkali. In a paralytic grinder of colours, one pill produced no effect, but four pills caused two slight agitations, and strong contractions. He was cured.

Another took four grains without any sensible effect, but five grains excited pretty strong agitations. The paralysis was much alleviated.

A painter and plumber, who both received the medicine, reaped little amelioration from it. In the former, three grains gave rise to pretty violent trismus; and in the latter, three grains and a half occasioned tetanic rigidity of the limbs.

The conclusions from the above cases are, that strychnine has a similar action on man to the extract of nux vomica, but in a more intense degree. Brucine acts in a much less intense manner, and may therefore supersede the alkali of nux vomica. With regard to their curative qualities, both strychnine and brucine are more or less efficacious according to the species of paralysis. Where this affection is connected with an inflammatory state of the brain or spinal marrow, it most probably will aggravate the symptoms. Where it is the result of apoplectic attacks, they are also often useless, but to the paralysis which occurs without any lesion of the brain or spinal marrow, such as is usual in those who work with preparations of lead, these alkalies are an efficacious remedy.—*(Majendie's Journ. de Phys.)*

ROBIQUET AND VILLERME ON THE CYANATE OF POTASSIUM AS A SUCCEDANEUM IN MEDICINE TO PRUSSIC ACID.

It is obvious that no medicine can be generally depended upon, or ought to be admitted into general use, which cannot be procured in a state capable of maintaining itself, at least, for a certain time, in a uniformity of strength, and other qualities, yet the prussic acid, which has been so much obtruded on the notice of the profession by a few admirers, is liable, in the highest degree, to this objection; by no process yet invented can it be obtained in a state in which its extreme volatility, and the strong propensity of its elements to disunion, do not rapidly alter its power to change its nature. Hence, that inequality which has been remarked in the mode of action and in the effects of this substance.

In subjecting the triple salt of the prussiate of potash and iron to a long continued heat, M. Robiquet observed a re-action to take place. The prussiate of iron was re-composed, and a mass left after a strong calcination, consisting of the cyanuret of potassium with the iron and carbon belonging to the decomposed salt. This mass readily dissolves in water, depositing the iron and carbon, and at the same time transforming itself into a hydrocyanate of potash.

The cyanuret of potassium is a white transparent substance, capable of enduring the action of fire, of preserving itself to an indefinite time without alteration, provided it be kept free from humidity. One grain of this salt, and half a drop of the pure prussic acid, have been dissolved

in equal quantities of water, and which have been tasted at different periods, both being exposed in open vessels; that containing the cyanuret of potassium, or rather, as it now becomes, the hydrocyanate of potass, has appeared much less weakened by the exposure than the other solution.

On placing a particle of the cyanuret of potassium on the tongue, a sensation of coolness is immediately felt, which instantaneously changes into one of causticity. A drop of the solution has a similar effect; but the caustic taste is not observed, excepting when the solution is much concentrated. The solution of one grain of the cyanuret of potassium in half an ounce of water, produces a more lively sensation than four drops of the "acide prussique au quart" obtained by the process of Gay-Lusac, diluted with half an ounce of water. The taste of bitter almonds is also equally powerful, as well as that acrid heat which spreads over the mouth and throat. Besides, there is a remarkable sensation of numbness—a sort of momentary paralysis of the tongue, extending rapidly to the neighbouring parts. This last effect is not, however, universal.

The tenth part of a grain of the cyanuret of potassium killed a linnet in one minute, and a guinea-pig died in three minutes from somewhat less than a grain. With regard to the hydro cyanate, a drop containing only the hundredth part of a grain of the salt in solution, destroyed a linnet in half a minute. The effect on other animals were in proportion.

It is not yet ascertained what influence the small portion of alkali in the salt may have in modifying the action of the acid; but this potash can be easily got rid of by adding a small quantity of vegetable acid to the solution. This new salt has not yet been exhibited in disease.—(*Majendie's Journ. de Phys.*)

ON THE REUNION OF WOUNDS AFTER GREAT OPERATIONS.

(*Archives Gén. de Méd. Juin.* 1823.)

M. Lisfranc, in a very elaborate memoir on a new mode of performing amputation at the hip-joint, has observed, that to prevent consecutive hemorrhage after this and other great operations, M. Dupuytren proposes to delay the dressing of the wound for two or three hours. Lisfranc himself has found, by many experiments on animals, and some trials on man, that, when the wound is left exposed till the oozing of blood has ceased, and is then carefully wiped, immediate adhesion is much more frequent than after the usual mode of management. Hemorrhage, he adds, is always most hazardous after the wound has been dressed; time is lost in removing the dressings; they often adhere firmly to the wound, so as to cause more pain by their removal than the operation itself; and the clots deposited in the cavity of the wound, though M. Serres has found them sometimes organized, may nevertheless play occasionally the part of foreign bodies, hindering adhesion, and exciting dangerous inflammation. The practice here recommended has been for some time employed by several London surgeons, and has also, we believe, been tried in this city. It is very favourably spoken of by all who have had recourse to it. A delay, however, of half an hour, or three quarters of an hour, has generally appeared quite sufficient for the oozing of blood to cease.

ON THE PRESERVATION AND BREEDING OF LEECHES.

(*Journal Univers. Avril* 1823.)

An interesting memoir on this subject has been lately read by M. Noble, physician at Versailles, before the Agricultural Society of the Seine and Oise; and it appears from his experiments, that these useful animals may be effectually preserved

and even bred in troughs, with the aid of a little care, and a few simple contrivances. M. Noble observes, that the great mortality among them, when crowded together in small vessels, is owing to the stronger destroying the weaker for the sake of nourishment. He therefore constructed a reservoir seven feet long, three feet wide, as many deep, with sloping sides lined with clay, supplied it with a constant stream of water, exposed it to the sun, sheltered it from the north, surrounded it with a ledge of turf, and planted rushes in one of the angles. In November 1820, he placed 2000 grey and green leeches in this trough, where they passed the winter, buried in the mud, without sustaining any loss whatever. Towards the end of spring, several young leeches were seen sticking to the old ones, and swimming round them occasionally, as if to try their strength. In August, he observed several smooth, conical holes in the mud, each of which contained a little oval cocoon, as big as that of the silk-worm, and porous outwardly like a sponge. Some of these were perforated at each end, and empty; others were filled with a transparent jelly; and the rest contained from nine to fourteen young leeches, which in a few days pierced their envelope, and swam vigorously about. M. Noble has not yet witnessed the formation of the cocoons; for as soon as the leech enters the conical holes, the water becomes muddy, and conceals their operations.

At the reading of the memoir from which the foregoing extract is abridged, a member, M. Plancy, observed, that the formation of cocoons by the leech has been long known to the people in the department of Finistere; and that it is through means of them that the dealers who supply the capital are in the custom of stocking their ponds. The workmen dig them up from the bottom of the little muddy pools, and place them in small ponds prepared for the purpose. Six months afterwards the young are removed into larger ponds, on the edges of which cows and horses are brought to feed, for the purpose of nourishing them and hastening their growth; experience having taught the country people, that the leech is never prolific, except after having sucked the blood of animals.

M. DELPECH'S CLINICAL SURGERY OF MONTPELIER.

(Continued from page 210.)

On Deformities of the Feet.—This essay contains the account of some original aud very ingenious methods employed by M. Delpech for the purpose of effecting a restoration to the natural form. Of these we find it extremely difficult to give an accurate account, without making references to the illustrative plates. We shall, therefore, content ourselves with noticing the most remarkable case, and the observations made on some of the others.

In March, 1816, a boy, aged nine years, was brought to M. Delpech. The right foot had been deformed from birth, in the following manner: the foot was so extremely extended as to be almost turned backwards; the os calcis was elevated so much as to be applied to the posterior surface of the bones of the leg. The attempt to bring or bend the foot forwards was succeeded by an insurmountable resistance, and an extreme tension of the tendo achillis. The tibio-tarsal articulation was very lax, permitting much lateral motion, and particularly a great inclination to the inner side. The muscles of the leg and thigh were weak and atrophic. When resting on the ground the toes were inclined to the back of the foot, and the base of support was formed by their plantar surface, and by the heads of the metatarsal bones. If the foot in this state was permitted to support the body, as in walking, it became in-

verted, and twisted on its longitudinal axis, so that the weight rested on the fourth and fifth metatarsal bones. The deformity had originally consisted in the direction of the foot downwards, the lateral displacement being scarcely sensible at first, but increasing as the child advanced in years. From different causes, no attempt had been yet made to check the progress of the deformity.

The age of the patient, the nature, extent, and duration of the deformity had rendered the case embarrassing. M. Delpech remarked that, after the accidental rupture of the tendo achillis, the greatest care and most methodical treatment always failed in attaining an immediate and direct union —and that the point injured presents a knot or swelling, and subsequently, a wasting or depression, the tendon having lost its original breadth and thickness. These phenomena depend, as in the cases of fracture of the patella or olecranon, on the interposition of a new formation connecting the divided extremities of the injured organ. It seemed probable, that what happened naturally in one case might be obtained artificially in another, and that the extent of the new formation might be considerably increased by means of permanent, steady, extension. The tendon might be divided completely, and that without touching the skin immediately over it. The foot might then be fixed by a suitable apparatus, so constructed as to admit of its being brought forward gradually.

The apparatus consisted in two elastic garters, padded, the one buckled above, the other below the knee; with a segment of a circle of iron, attached to the upper garter, and passed in a groove of the lower one, which could be fixed there by the pressure of a screw. Two rods of iron projected from the lower garter forwards, an iron axis running through them, and supporting two cog wheels. An elastic band was buckled round the foot, behind the toes, and gave attachment to two narrow iron plates, running upwards, and indented in their upper half, the indentations exactly corresponding, and fitting to the teeth of the cog wheel on each side.

All being prepared, and the patient laid on his belly, M. Delpech plunged a knife in front of the tendon, from the inner to the outer side of the leg, making an incision an inch long, in the integuments on each side. Withdrawing the knife, he introduced another, very convex at the point, and directing it from before backwards, he cut through the tendon transversely, without injuring the skin immediately over it. The operation was not very painful, and immediately afterwards M. Delpech was gratified to find that he could bend the foot, so as to bring it to a right angle with the leg. Satisfied with this attempt, he fixed the foot in the same state as before the division of the tendon, bringing the heel forwards by a bandage passing under it, and fixed to the iron bars which ascended from the toes to the knee. A compress was fixed, with sticking plaster, over the ends of the tendon, which, as far as could be judged through the integuments, were in immediate contact. The limb was then placed on a pillow, the leg and thigh being bent. Little pain or constitutional disturbance followed, and it was not until the tenth day that M. Delpech exposed the wound, but without moving the apparatus. The swelling was confined to the wounds and point of section, the ends of the tendon appearing to be in close apposition.

On the twelfth day the suppuration of the wounds was accompanied by some sloughs of tendon, attributable to the exfoliation of the divided parts. On the twentieth day all pain had ceased; one wound had healed, the other nearly so. No interspace was perceptible between the ends of the tendon, but merely a contraction or

diminution of its bulk. The cicatrices in the integuments, and the divided part of the tendon, were plainly seen to move upwards and downwards when the foot was bent and extended. On the twenty-eighth day the wounds were quite closed, and the cicatrices somewhat retracted in front of the tendon. The contracted part of that organ was only a few lines long; it evidently moved with the foot, and M. Delpech judged it sufficiently firm to bear extension. The bandage over the heel was accordingly slackened, the foot a little bent on the ancle, and fixed in that posture by a moderate rotation of the cog wheel, elevating the ascending rods a few teeth higher. M. Delpech was surprised to remark that no pain followed, and that though the point of the foot was raised considerably, there was not any evident stretching of the new formation. He discovered, however, that the patient had loosened the band below the knee, and had bent the leg more on the thigh. He replaced the apparatus, and by means of the segment of a circle, already described, extended the leg on the thigh almost completely, at the same time placing the patient on his back. Some pain succeeded, principally at the point of section, but extending over the whole limb.

Up to the 31st day the foot was progressively brought forwards by the apparatus. Every time that the force distending the tendon was increased, the patient complained of pretty severe pain, lasting two or three hours, and gradually ceasing. M. Delpech, however, observed that the laxity of the tibiotarsal articulation, caused by the origiual deviation of the foot inwards, began to produce a deviation in the opposite direction outwards, when acted on by the distending force of the apparatus. To obviate this accident, a leather garter was buckled below the knee, and to it, in the front of the leg, was fixed a strap two inches long, provided with a buckle at its lower end. A second strap was fixed round the foot, behind the toes, and extending upwards in front of the leg, was buckled to the other. The leg was then placed in a fracture-box, with two large padded splints, extending from the knee beyond the foot. After the application of this apparatus, the strap of the foot was buckled into that of the knee, so that all lateral deviation being prevented by the splints, the foot was carried directly forwards.

The increase of pain at the point of section shewed that the new apparatus acted efficaciously: the foot made great progress; and, on examination, the ends of the tendon were found nearly an inch and a half asunder. A few days sufficed to bend the foot so as to bring it to a right angle with the leg; but the apparatus was retained so as to keep the parts in that position during the period necessary to effect the solidification of the new formed part between the ends of the tendon. At the end of a month it appeared to have reached the greatest possible extent of its elongation, contraction, and density. Its length appeared to be about two inches, its bulk equal to half the natural size of the tendon, and it firmly resisted every attempt to bend the foot farther than to a right angle with the leg. The tendency to deviation outwards still remained, and evidently was only to be remedied by an increased developement of the bones forming the articulation. The patient could stand upright, could support himself on one or both feet, could walk quick or slow, and could even run, without any other inconvenience than that resulting from the slight deviation of the foot. At the same time his recovery was retarded by the occurrence of scrophulous abscesses about the knee; his health was, however, re-established by sea-bathing, and similar measures. "He now," says M. Delpech, "at the end of seven years, enjoys good health, and by the secu-

rity and rapidity of his progression, forms a subject of wonder and admiration to all who are acquainted with his previous condition."

(*To be continued.*)

AVERILL'S OPERATIVE SURGERY.

(Continued from page 213.)

Castration.—M. Lisfranc, after the first incision, recommends the tumour to be dissected from below upwards, which prevents the blood collecting before the point of the knife in the cellular texture of the scrotum. He secures the cord from slipping within the ring, by directing an assistant to place his index and middle fingers at a distance from each other behind, and his thumb before it, opposed to the interspace; he thus presses it against each finger, which prevents the possibility of its being retracted; he then cuts through it, and ties such vessels as require ligatures.

Vincent Karn, a German surgeon, recommends the operation to be thus performed. An assistant with the fore-finger and thumb of one hand takes hold of the cord, with the integuments, above the part where it is to be cut through, whilst with the other he separates the diseased from the healthy testicle. The operator then raises the one diseased, and by a single stroke of the knife cuts it away with its scrotal covering, beginning ths incision at the raphe of the scrotum and cutting obliquely upwards and outwards. The arteries being taken up and the edges of the wound approximated, the operation is finished. This method has the advantage of being short; but as in many cases the testicle is too much enlarged to admit of being removed at one cut, and as the cord cannot be securely fixed by being pinched up within the integuments, the former must be considered the safest plan of performing the operation.

When the disease extends along the cord, it is cruel to submit the patient to the unnecessary pain of the operation: though M. Lisfranc says in cases of this kind he has seen M. Dubois pull down the cord and then divide it, and M. Dupuytren cut up the inguinal canal to the internal ring, and there cut through the cord; but in all the cases the patients have died.

Again, it is a matter of opinion whether it is not the better plan to secure the whole cord by ligature, and thus do away with the necessity of tying each vessel separately. M. Richerand practices the operation in this way; but cases are related in which a ligature, including the whole cord, has produced such excessive pain and irritation as to necessitate its removal: the tying of nerves, and veins too, has sometimes produced fatal consequences, therefore the method of securing each vessel separately appears to be that which may be most safely pursued.

Amputation of the second, or third phalanx of a Finger.—With us this operation is generally performed by making a circular incision round the finger, about a quarter of an inch nearer its extremity than the joint at which you are about to amputate; then an incision on each side, extending back from the first to the second joint, so as to form two flaps, which are to be dissected back, and the tendons, with the lateral and capsular ligaments cut through, which finishes the operation.

The following is the process adopted by M. Lisfranc, certainly more expeditious than the former; but as it leaves only a single flap, it is not probable that the wound will heal so readily by adhesion, as when the operation is performed in the manner already described; yet a case might possibly occur, in which the one operation could be performed, and the other not be practicable.

The hand being prone, is fixed by an assistant, who bends the other

fingers, and separates them from the one to be operated on. The operator, with the fore-finger and thumb of his left hand, takes hold of the phalanx to be amputated, placing his thumb on its dorsal, and his finger on its palmar surface, and having half bent it, observes the situation of the small fissure in the integuments on the side of the bone caused by that position; immediately before which the joint will be found. At this point, with a straight bladed bistoury, he makes his incision, and at one sweep lays open the joint by cutting through the integuments and ligaments on the sides of the dorsum of the finger, from left to right. In cutting the ligaments at the sides, the edge of the bistoury is directed obliquely towards himself, and those on the dorsum in the opposite direction. The phalanx is now to be held by its sides, and the ligament at the under part cut through; the bistoury is then placed horizontally with regard to the phalanx, and a flap of sufficient length formed from its palmar surface by cutting between the integuments and bone.

In cases where the finger is so much swollen as to render demiflexion difficult and painful, M. Lisfranc recommends the operation to be reversed, and performed thus:—

The hand being supine and fixed by an assistant, the operator extends the diseased finger, and bends the others, that they may be out of the way of the knife. He then takes hold of the phalanx with his left hand, placing the thumb on the palmar, and fore-finger on the dorsal side, while with his other fingers, he forms a support for the bistoury; which is to be introduced horizontally, immediately anterior to the fissure, in a line with the joint, and pushed through beneath the integuments to the opposite side, the point being directed obliquely upwards to avoid the bone, when a flap is to be formed by cutting forwards and outwards. This being done, and held back by the assistant, the heel of the bistoury is applied to the base of the flap; when, by drawing it from left to right, the joint is cut through, which removes the phalanx. In operating in this way at the second phalanx, the point of the bistoury should be passed immediately under the fissure formed in the integuments on the palmar surface. No ligature will be required for the divided vessels; pinching their bleeding extremities with the forceps being sufficient to stop the hemorrhage.

(To be continued.)

HOSPITAL REPORTS.

OPERATIONS.

Guy's Oct. 27.—The only operation of any importance since our last report, has been that for popliteal aneurism by Mr. Lucas.—The case was of eight weeks standing—the aneurismal sac just above the inner condyle of the os femoris, and very much diffused—the pulse indistinct. Mr. L. applied two ligatures, and divided the space between them.

Mr. Lucas also operated for the removal of pendulous steatamous tumour, situated between the nates of a male patient.

The operation for tying the subclavian artery, performed by Mr. Key, assistant surgeon to this Hospital, as reported in our thirty-third number, has completely succeeded. Mr. Key, then, has the honour of being the first successful operator in a similar case.

HOTEL DIEU, PARIS.

Oct. 24.—The following paragraph, translated from the ETOILE, refers to the former accounts of Magendie's experiments on the alledged case of hydrophobia, at this Hospital, as stated in our last number, (38.)

"As we pre-supposed the invalid into whose veins the warm water was injected, at the HOTEL DIEU, is dead; and also, as we endeavoured to prove, it turns out, that he was afflicted with quite a different disease to that of hydrophobia. A number of ulcers were discovered in his bowels, of which fever and delirium were either the symptoms or effects."

WILL OF THE LATE DR. BAILLIE.

The late Dr. Baillie bequeathed by his will £300 to the College of Physicians,

and all his medical and anatomical books, together with all the copper-plates belonging to his work upon morbid anatomy. (In case of the death of his son, William Hunter Baillie, without issue, he has also left to it a further bequest of four thousand pounds.) He has directed his two introductory lectures to his courses of morbid anatomy, his lectures upon the nervous system, delivered before the College of Physicians, and a short account of his medical practice, to be printed but not published; remarking that though not sufficiently important for publication, they may yet contain matter too useful to be altogether lost. The various articles of plate presented to him in the course of his professional practice, are left to his son, to be preserved in the family. £300 are left to the society for the relief of widows and officers of medical men; to Mrs. Baillie he has left his house, furniture, &c. a sum of £2000. and one thousand per annum; to his sisters Agnes and Joanna Baillie, £150 per annum each; and there is further provision to a considerable amount, for these and other legatees, in case of his son dying without issue, to whom is given the residuary personal estate, as well as the freeholds in the county of Gloucester, and elsewhere. Thomas Denman and Thomas William Carr, Esqrs. are the Executors, and have a legacy of £100 each, as a compliment for trouble. The will was proved in the Prerogative court on the 21st inst. and the effects sworn under £80,000—it is dated the 21st of May, 1819.

MEDICAL BOOKS published by E. COX and SON, St. Thomas's Street, Southwark. Sold also by Simpkin and Marshall, Stationers' Hall Court, Ludgate Street; and John COX, Berner's Street, Oxford Street.

A PHYSIOLOGICAL SYSTEM of NOSOLOGY, with a corrected and simplified Nomenclature. Dedicated, by permission, to the Royal College of Physicians, London. By John Mason Good, M.D. F.R.S. 8vo. 1*l.* 1*s.*

A GENERAL SYSTEM of TOXICOLOGY, or a Treatise on Poisons drawn from the Mineral, Vegetable, and Animal Kingdoms. 2 vols. 8vo. 1*l.* 10*s.*

SUPPLEMENT to Ditto, with 21 coloured Plates, 12*s.*

ELEMENTS of JURIDICAL or FORENSIC MEDICINE, for the Use of Medical Men, Coroners, and Barristers. By E. G. Male, M.D. Second Edition, 9*s.*

MEDICAL BOTANY; or, History of Plants in the Materia Medica of the London, Edinburgh, and Dublin Pharmacopœas, arranged according to the Linnæan System. 2 vols. royal 8vo. with 138 Plates, and Portrait of Linnæus. 1*l.* 4*s.* bds.

The DISSECTOR'S MANUAL. By J. H. Green, Surgeon to St. Thomas's Hospital. 8vo. 10*s.* 6*d.* with Plates, 16*s.* bds.

An ESSAY on ANIMAL, VEGETABLE, and MINERAL POISONS, in which are detailed the Symptoms, Mode of Treatment, and Tests, of each particular Poison, with the general Morbid Appearances on Dissection. With 13 coloured Plates, 3*s.* 6*d.*

NOSOLOGY; or, Diseases arranged in their Classes, Orders, Genera, and Species; accurately defined. By the late William Cullen, M.D. 32mo. 2*s.* The same in Latin, 2*s.* or together, 3*s.* 6*d.*

The DRUGGIST'S POCKET GUIDE, containing a List of the Duties, Drawbacks, &c. on Drugs, Chemicals, and Perfumery. New Edition, corrected, price 1*s.* 6*d.*

MAGENDIE'S ELEMENTARY SUMMARY of PHYSIOLOGY. Part I. Vol. 2, 6*s.* Vol. 1 of the same Work, 7*s.*

The HOSPITAL PUPIL'S GUIDE, including Directions as to the best mode of attending to the various branches of Medical Study. 1*s.*

The WEEKLY MEDICO CHIRURGICAL and PHILOSOPHICAL MAGAZINE. No. 1 to 39, at 4*d.* each; or Part 1 to 6, at 2*s.* each.

The ANATOMY of the HUMAN EAR, illustrated by a Series of Engravings, of the natural size, with a Treatise on the Diseases of that Organ. By the late J. C. Saunders, 8*s.*

SCALE of ADVERTISEMENTS,

For the Weekly Numbers of this Magazine.

Twelve Lines or under....	£0	7	6
Every additional four	0	1	0
A Column.....	1	1	0

*** *When more Advertisements are received than the last page will contain, an additional leaf will be appended.*

London:

Printed by E. JUSTINS, 41, *Brick Lane, Spitalfields.*

Published by COX and SON, St. Thomas's Street, and 39, High Street, Southwark. Sold also by Sherwood, Neely, and Jones, Paternoster Row; Simpkin and Marshall, Stationers' Court; John Cox, Berner's Street, Oxford Street; Callow and Wilson, Gerrard Street, Soho; W. Stewart, South Bridge Street, Edinburgh; J. Cameron, opposite the College, Glasgow; Hodges and M'Arthur, Dublin; &c. &c.

THE WEEKLY

MEDICO-CHIRURGICAL & PHILOSOPHICAL MAGAZINE.

No. XL.] SATURDAY, NOVEMBER 8, 1823. [*Price* 4*d.*

" FLORIFERIS, UT APES, IN SALTIBUS OMNIA LIBANT
OMNIA NOS, ITIDEM, DEPASCIMUR AUREA DICTA."

CONTENTS OF THE MEDICO-CHIRURGICAL TRANSACTIONS, *just published.*

(Continued from page 228.)

CASE OF ASCITES, (read May 6th, 1823,) connected with utero-gestation, successfully treated by operation. By GEORGE LANGSTAFF, Esq. Surgeon.

This case is not only of rare occurrence but of considerable importance to those who practise midwifery: we shall extract as much of it as will convey to the minds of our readers a just idea of its merits to their attention.

" A lady, thirty-nine years of age, of good constitution, who had given birth to eight children, became again pregnant. At a very early period she appeared unusually large, and felt uncomfortable, and not disposed to take her accustomed exercise. At the fifth month of utero-gestation, when she became sensible of having what is termed quickened, the abdominal enlargement was so considerable as to occasion her friends to remark that her period of pregnancy was further advanced than she supposed; but, having been always correct in this respect on former occasions, she could only account for her grotesque size by supposing she might have twins, which had once before happened. During the latter part of the sixth month and the first week of the seventh, the pains in the abdomen and distension were so distressing as to require general and local blood-letting, and a blister to the abdomen. From the œdematous state of the legs and thighs, and also from the sense of fluctuation imparted to the hand by sounding the abdomen, it was pretty evident that there was fluid in the abdominal sac, yet the sensation of fluctuation could not be distinctly felt in all parts of the abdomen alike; it was more evident in the upper parts of the hypochondriac regions, particularly in the right side, where there was an irregularity given to the rotundity of the abdomen. Calomel, digitalis and squills were employed, but these made no impression on the disease. The dropsical symptoms becoming more urgent, and the life of the patient in danger, it now became a very serious point to decide whether premature labour should be brought on, or the operation of tapping performed.

At the request of Mr. Langstaff, Dr. Farre was consulted, who, after a serious consideration of the case, gave it as his opinion that premature labour should be preferred to drawing off the fluid collected in the abdomen; but, at the same time, expressed a desire to have this operation deferred as long as possible with safety to the patient, that the chance might be given of preserving the life of the child. Dr. Davis was also called in, and after directing particular attention to the case, gave his opinion in favour of premature labour.

On the 19th of March, the liquor amnii, small in quantity, was let out —the symptoms became more distressing—the patient was evidently sinking, and no signs of labour had appeared. Mr. Langstaff proposed another consultation, which was positively refused. " I now," says Mr.

L. " thought it my duty to propose letting out the fluid collected in the peritoneal sac, and at length the operation was agreed to, but not without my having promised a more successful issue than the nature of the case warranted; yet I thought my conduct justifiable.

" On the 20th of March, I cut down to the peritoneum, about two inches below the umbilicus, then carefully perforated that membrane with a moderate sized instrument, such as is commonly employed in performing the operation of paracentesis abdominis, taking especial care to introduce the point of the trocar only a short distance beyond its shoulder, that the uterus might not be injured; the trocar was then withdrawn, and the canula pushed a little further into the abdomen.

In this manner the operation was performed — circumstances having been met according to the exigencies of the case. The whole of the fluid which was transparent, drawn off, amounted to twenty-five pints. About 8 hours after the operation, pain was complained of over the whole of the abdomen, the patient was restless, skin hot, pulse 120, " not full but wiry." Twenty-four ounces of blood were drawn from a vein in the arm, which was considerably more inflamed than the blood usually is when taken during pregnancy. Saline aperient medicines were prescribed, and five grains of calomel, with the same quantity of the extract of hysocyamus at bed-time.

" March 21.—The bowels freely relieved by the medicine,—anxiety and restlessness much the same as yesterday—skin hot—tongue white and dry—pulse 100, rather full and hard—urine high coloured and deficient in quantity—and, there was pain in the abdomen.

" March 22.—Although the bowels were freely open, and the urine increased in quantity, the pain and tenderness in the abdomen continued; pulse 110, fuller and harder than yesterday; tongue very white and dry. Thirty ounces of blood were taken from the arm, which was more highly inflamed than that drawn on the 20th. Saline medicines with digitalis were ordered, and fifteen drops of the liquor opii sedativus at bed-time.

" March 22.—She passed a more comfortable night than she had experienced for several weeks; the pain in the abdomen was considerably diminished, and she could bear light pressure with the hand—pulse 94, much reduced in power, tongue not so dry. Towards evening uterine pains began, and she was delivered of a dead child about 4 hours after the commencement of the labour. The child, which did not appear to have advanced beyond the seventh month, had been dead several days, as the skin was much discoloured, and the cuticle separated easily from the cutis. The labour was natural; the placenta was not expelled for upwards of an hour after the birth of the child, although correct pressure was applied to the abdomen to excite the action of the uterus.

Mr. Langstaff adds, that he fully expected uterine hæmorrhage after the expulsion of the placenta, but the discharge was not profuse. Six hours after the labour, fifteen drops of the liquor opii sedativus were given; the patient slept comfortably several hours. " Since that time, strict attention to regimen and suitable remedies have been enjoined, and I feel great satisfaction in saying that I now (April 12,) consider the patient out of danger; and there does not seem any reason to dread re-accumulation of fluid in the peritoneal sac."

Mr. Langstaff's observations on this rare and important case, are too interesting to admit of being condensed within the limits of our weekly miscellany—to do them justice, we are necessarily obliged to

defer them until our next number; when, as a matter of course they will be resumed.

(*To be continued.*)

HEADS OF SURGICAL LECTURES, *delivered by* SIR A. COOPER, Bart. *at* ST. THOMAS'S HOSPITAL.

(Continued from p. 231.)

October 3rd.—*On Ulceration.* "Ulceration is the absorption of any constituent part of the body. Wherever there is an increase of action there is an increase of deposit, adhesive or suppurative. Inflammation not only influences the arteries but also the absorbents. There exists a natural balance between the arteries and absorbents—and this balance is increased or destroyed in different ways at different periods. It was at one time thought that ulceration could not occur without the effusion of matter; but this is not the case, as matter is not necessary to the process of ulceration. Ulceration is the result of inflammation and pressure, and may proceed from a high degree of either one or the other—still, to a certain extent it is the union of both; although inflammatory action itself is not the immediate cause only when attended with pressure, *e. g.* in aneurism of the aorta, where matter is not formed, the parts in contact with the aneurismal sac, such as the ribs and sternum, they will become absorbed merely by the mechanical pressure of the sac, which produces increased action of the absorbent vessels in those parts--in fungous tumours of the dura mater the bone will be absorbed without any collection of matter.

"During the ulcerative process the constitutional symptoms are very slight—the pulse is small and under 100, what is called the hectic or chronic pulse—there is a gnawing kind of pain as if a number of little animals were eating the part—and the appearance is as if the part had been eaten by worms; the surface is irregular and looks as if a portion of the body had been removed. Not only the cancellated part of a bone is removed by ulceration, but also the structure in which that part is contained.

"Ulceration is an exceedingly rapid process—so much so that as much may be removed by it in a few hours, that would occupy the powers of restoration in re-producing it as many weeks or months—much in this case depends upon the form and kind of ulceration.

"There seems to be a curious law attendant on the ulcerative process, which shews itself by its tendency to the surface more generally than to the internal parts of the body; as may be illustrated in those cases where matter, forming in the pleura close to the sternum, instead of ulcerating that membrane which is not thicker than paper, it absorbs the sternum, and forces its way outwards —also, when matter forms in the abdominal muscles and peritoneum instead of forcing its way into the viscera it commonly finds an outlet in some part of the body:—it is also remarkably displayed in abscesses of the liver, where some of the largest have been seen; it forces itself outwards, or gets into the stomach, whence it is ejected by vomiting or by stool, and not into the cavity of the abdomen, where it would soon prove destructive of life. The same occurs with respect to abscesses formed on bones—if there be an abscess on the tibia, it breaks on the thinnest surface, that is, where it is only covered with periosteum and bone—in consequence of the less degree of vitality and irritability than on deeper surfaces. The more external parts of the body are the most irritable and most exposed to vicissitudes of temperature than those which are more deeply placed and nearer the centre of body, where they are fortified by a stronger circulation. The adhesive process forms internally, the suppurative externally. The interior parts of the body are continually exposed to changes of temperature. Newly

formed parts are more liable to be absorbed than parts that have not been previously affected. A cicatrix or newly-formed skin, is sooner acted upon by the ulcerative process than the originally formed cutis—*e. g.* if inflammation takes place in a patient's leg that had previously been affected with ulceration, the sore will break out much sooner than if nothing of the kind had pre-existed. In fractured limbs also when callus forms, they are much more likely to be broken again than if no such accident had happened;—to bear out these assertions we need only refer to Lord Anson's voyage, where those seamen who were afflicted with scurvy had old ulcers breaking out afresh, and old fractures under the same circumstances were again separated. These cases were published by Lord Anson's chaplain, and are worthy of a perusal as remarkable instances of absorption.

"Parts remote from the heart ulcerate more readily than those in its more immediate vicinity—for one ulcer in the arm we meet with 20 in the leg. Those structures of the body possessed of the least vital powers are most susceptible of ulceration. It takes place readier in the cellular and adipose, than in the muscular, tendinous, ligamentous, nervous substances, or blood-vessels. In abscesses of the finger, the theca, under which the matter is embedded, will not give way in consequence of its resisting the ulcerative process—the aponeurosis of the palm of the hand in the same manner. Where matter is formed in these parts, it causes considerable constitutional disturbance, &c.

"Ulceration, although a diseased process, is, nevertheless, not without its advantages to the animal economy, by being the means of discharging extraneous bodies—*e. g.* a ball, the ligature of an artery, &c. are disengaged by the ulcerative process—sloughing parts are also removed in the same way. It is also useful in removing the exfoliation of bones which would require years by a putrefactive medium, but which is effected in three or four months by the ulcerative process, &c. &c.

Of Abscesses. — An abscess is a formation of matter contained within a cyst, and this cyst is produced by inflammation, which prevents the disease from spreading. In the formation of an abscess, the inflammation which takes place in the cellular membrane prior to the appearance of matter, is of the adhesive kind, which forms a kind of wall or cyst whereby the further spreading of the disease is prevented. In the middle of this wall there may be observed a partition, and a small quantity of matter which is poured into the coagulable lymph, so that, by the matter pressing on the surrounding solids, it gives them a tendency to ulceration. The abscess does not ulcerate equally on all sides, but more particularly between the skin and its original seat. This process goes on in a regular manner, and matter is still secreted:—the process of absorption continues as long as matter is poured out, till at length, by means of the encreasing pressure, the whole is taken up.

"There are several dangers attendant on abscesses — the first is that which arises in consequence of their occupying a large surface. Secondly, when seated on an organ essential to life, *e. g.* the brain or heart, where the lodgment of a very small quantity of matter would soon prove fatal—other organs, *e. g.* the lungs and liver do not appear to sympathize so much with the constitution—abscesses in them may exist to a great extent. Abscesses are also dangerous although they may not be exactly seated on parts important to life, but by the pressure effected on them from contiguity of position, *e. g.* matter seated behind the larynx, so as to press on the trachea, will destroy life by producing suffocation. The reason lumbar abscesses are

dangerous, is on account of their beginning from a bone and extending towards the surface, and as bones require to exfoliate before granulation can take place, so that from the length of time occupied by this process, which is very tedious, patients seldom recover. Abscesses may also prove fatal from their number, *e. g.* as in the small-pox, &c.

November 5th—*Treatment of Abscesses.* "Abscesses are chronic or acute—an acute abscess goes through its process in about three weeks. When an abscess is formed accidentally, poultices and fomentations are all that is required—in this manner it proceeds best to the ulcerative process. But in constitutions much worn down by debility, and in abscesses of an indolent nature, it is proper to have recourse to stimulating remedies, in order to excite the system, giving, at the same time, tonics and a generous diet.

"The best mode of opening abscesses is with the lancet:—if the abscess occupy an extensive surface, after the opening is made, a roller should be applied round it, leaving an opening sufficiently large to give vent to the matter, when, by the effusion of lymph thrown out, its sides will unite.

"There are some abscesses that require earlier opening than others—such, for example, as are situated under the fascia and ligamentary expansion—the thickened cutis of the palm of the hand and sole of the foot—the openings here should be made very free as it prevents them from extending. Abscesses also that are near bones, *e. g.* under the pericranium—or those seated near important organs, *e. g.* eye, thorax, abdomen, joints, &c. require the same treatment.—The opening into an abscess should be made at the most pendulous part, or where it tapers off in the shape of a cone. It is here the fluctuation will be best felt, and where it indicates that nature, if left to herself, would perform the operation.

"Weeks and months sometimes elapse before the matter of an abscess is discharged, *e. g.* in psoas abscess. Matter frequently burrows under ligamentous and tendinous coverings, and, as before observed, it is also here that it should be early set at liberty. The best treatment of acute abscess is to give the liquor. ammon. acetat.—sulphas. magnesiæ and tinct. opii—the local applications should consist of heat combined with moisture,—the one determines a greater flow of blood, whilst the other relaxes the part;—by this means the ulcerative process proceeds more rapidly. Poultices to abscesses, whether they be made of linseed meal, bread and milk, &c. should be applied on oil skin; by this means evaporation is prevented which would retard the ulcerative process. The emplastrum galbani compositum—the emplastrum ammoniæ c. hydrargyro are good applications to those of an indolent nature. The emplastrum thuris is more tranquillizing, &c. The exceptions to opening of abscesses are when, in consequence of having taken great quantities of mercury, fluctuation of matter is felt under the periosteum or pericranium, &c. over which no flush or redness appears—these are not to be opened, as by the use of the sarsaparilla decoction they will soon become absorbed.

"In chronic abscesses, where the constitution is generally in fault, we must give it additional powers by prescribing a generous diet—ammonia with bark—applying to the part itself stimulating poultices; the best is that made with common salt (murias ammoniæ) a table-spoonful to a pint of water, thickened with bread.

"Hectic fever, more or less, according to the extent of the abscess, affects the system:—hectic fever is a consequence of constitutional irritatability induced by the abscess itself, and not of the absorption of matter as has erroneously been supposed. In proof of this, there is usually no

appearance of hectic fever until the matter of an abscess is discharged. The hectic comes on with rigors succeeded by heat and chilliness, once or twice in the twenty-four hours, accompanied with copious perspirations—the pulse is small but frequent, with an unnatural moisture of the skin, indicating debility—urine, pale and rather copious — tongue, dry and parched, indigestion, vomiting, and diarrhœa.

As a proof that hectic fever prevails where there is no formation of matter—a girl was admitted into the hospital for an affection of the knee, accompanied with pain, without any symptoms of matter being collected. Hectic fever came on twice a day which so reduced her constitution that it was deemed advisable to amputate, conceiving matter might be formed which could not be detected. It was however found, after the limb was removed, that nothing of the kind existed, and that the appearance and only visible seat of the disease was in the condyles of the os femoris in the cancellated structure of the bone. A small ulcer in the lungs may bring on hectic symptoms, whilst a very large one in the leg will produce no such effect.

Sir Astley again repeated that air on internal surfaces has no influence whatever in producing inflammation. In support of which he instanced a number of cases the result of experiments made upon animals: as well as one of a soldier making an incision just above the pubis and inflating the scrotum in order to obtain his discharge, by imposing it on the examining surgeon as hernia. Emphysema in the lungs shews the same circumstance, *e. g.* if the lungs are wounded by any sharp instrument the air immediately escapes from the bronchial cells into the cellular membrane, and puffs it up: still, after the absorption of this air, no traces of inflammation are observed. A variety of other examples were given—but as Sir Astley judiciously observed "Where you doubt—observe, and make experiments—all your thinking will teach you nothing."

(*To be continued.*)

M. DELPECH'S CLINICAL SURGERY OF MONTPELIER.

(Concluded from page 238.)

M. Delpech avoids entering at length into any inquiry as to the causes determining deformities of the feet. He is inclined to think that, in whatever manner produced, the deformity commences in the bones, and that the distortion of muscles, &c. is only secondary. The deformity is generally congenital, and in its commencement the muscles are in a state of quiescence, and not partially relaxed and partially stretched, as might be supposed the case, were the change of position of the bones caused by the contraction or imperfect developement of one or more of the muscles operating on them. This fact becomes still more evident when in such cases the muscles are atrophic, and, as it were, paralyzed. This last argument may indeed be answered by a fact which M. Delpech has uniformly observed, namely, that attempts at walking while the deformity remains uncorrected, instead of favouring, injure the developement of the muscles, not only in the leg but even the thigh; and that in such cases the most certain means of removing the atrophic and semiparalytic state, consist in removing the deformity by suitable mechanical measures. Hence, though the muscles of a distorted limb may be atrophic and paralytic, even at the time of birth, it is impossible to say that this state may not have been preceded by an increased developement of some particular muscle or muscles, drawing the moveable part of the limb in some particular direction.

From observing the occurrence of atrophy in the muscles of a deformed limb, even at a period too early to

admit of their exercise, M. Delpech deduces the physiological law—that the preservation of the size and activity of muscles depends partly on their retaining the just degree of tension, naturally designed for them, and which becomes changed in cases of deformity. Whilst this error in the state of tension remains, whether it be in excess or defect, the bulk and power of the muscles progressively diminish, even notwithstanding the physiological necessity for their increase, which attempts at exercise produce. The proposition, on which all hopes and every plan of treatment must rest, is the natural consequence of the former, viz. that the power of atrophic muscles, and the activity of their nutrition, may be restored in cases of deformity of the extremities, by correcting the faulty position of the bones of the part. Guided by this principle, the surgeon must vary the mechanical means of effecting the object in view, according to the variations presented by individual cases.

From the results of his observation and experience, M. Delpech concludes—

1. That little advantage is gained in attempting the treatment of deformities of the feet before the patient is able to walk, as it in general happens that such endeavours tend to diminish the bulk and contractibility of the muscles.—This conclusion, it must be allowed, presents something inconsistent with his observation, that an atrophic state of the muscles is the natural consequence of the distortion of a limb.

2. That it is important to proportion the force of the apparatus, not only to the extent of deformity, but also to the power of the muscles; for if, in the hope of speedily removing the deformity, an excessive power be employed, the muscles are kept at rest, and diminish in size and activity, whilst the pressure necessarily made on the integuments and subjacent parts is so great as to cause inflammation, suppuration, or even gangrene, and perhaps render the disease incurable, from the impossibility of applying any more effectual apparatus at a future period.

3. The power which it is intended to apply should have an opposite direction to the deviation, and to ensure this the combination of several circumstances is necessary, the absence or presence of which render any case more or less favourable; they are—

(*a*) The existence of a point of support for the power to be applied, near to the deformity, extensive, solid, and not easily hurt.

(*b*) That the power be applied as far as possible from the deformity, not only from mechanical causes, such as the greater power of a long lever, and the diminution of pressure on the skin, but also, because as the deformity affects several bones, the farther the power is exerted from the centre of deformity, the greater is the number of bones acted on.

(*c*) The action of the power employed should be perpendicular to the parts on which it is exerted, as well as on the parts which are to be moved.

(*d*) The power employed should be elastic, so as not to oppose a sudden and forcible resistance, even to efforts acting in a direction contrary to that in which it is applied.

4. It is of the greatest importance that the apparatus should be so disposed as to admit and to facilitate not only locomotion, in which the limb merely supports the body perpendicularly, but also the action of the muscles in every direction. For this reason the apparatus should be constructed with reference to anatomical principles, and should be as light as possible: those employed by M. Delpech, in lateral deviations, did not weigh more than two ounces, and sometimes less.

The author adds, that there are

cases to which these remarks are not applicable, and in which the required conditions cannot be fulfilled. The case we have related is an instance, and in such the practitioner is obliged to look for and create new resources.

As to the section of tendons, M. Delpech is convinced of its advantages, and of its practicability in every situation in which these organs oppose themselves to the restoration of the natural form of the extremity.

The two remaining papers in the book are by no means of the same interest or value with those of which we have presented an analysis: we are prevented by our limits from entering on them at present, but may probably take an opportunity of giving an account of their contents at a future period.

AVERILL'S OPERATIVE SURGERY.

(Concluded from page 239.)

Amputation at the Wrist Joint.—The following is M. Lisfranc's method: The tourniquet being applied, and the fore-arm fixed by an assistant with the hand prone, the operator places his two index fingers above the joint, one on the radius, the other on the ulna. He then bends and extends the hand, whilst doing which he draws his fingers down the bones till he feels the styloid process of the radius, on the extremity of which he places the fore-finger of his left hand, and his thumb on the corresponding point of the ulna, if it be the right hand to be removed, and the reverse if it be the left. With a catling he makes a semilunar incision through the integuments, with its convexity towards the hand, beginning at the point before the thumb, and ending at the opposite one. Then, directing the point of his knife obliquely downwards, he cuts through the ligaments on the ulnar side, and by depressing the handle, continues his incision through the tendons and ligaments on the dorsum to the styloid process, at the same time bending the hand so as to expose the articulatory surface of the bones of the wrist. Having glided his knife through the joint, and divided the capsular ligament, and tendons below, he forms a flap of the integuments, of sufficient length to cover the stump, from the palmar surface, by cutting towards himself, taking care to avoid the pisiform bone.

The latter operation may be reversed and performed thus: Having found the extremities of the radius and ulna as before, place the forearm in a state between pronation and supination, and thrust the point of the catling beneath the integuments from the anterior and inner edge of the ulna, till it appears just before the styloid process of the radius, and form a sufficient flap by cutting towards the palm. Then cut through the integuments and tendons on the dorsal side, and finish the operation by cutting through the joint, from before the styloid process of the radius downwards.

Three arteries generally require to be secured after this operation: the radial, the ulnar, and the interrosseal. The cut surfaces are to be approximated by adhesive plaster and the arm kept in a sling.

Amputation of the Elbow Joint.—Though the stump after this operation is not more useful than when the amputation is performed at the lower part of the humerus, and though the healing process is no longer protracted, yet it has been performed by M. Dupuytren in Paris. M. Lisfranc relates that in one case of which he was a witness, the wound was several months before it was completely healed.

The following is the method of operating, adopted by M. Dupuytren.

The brachial artery being compressed by the tourniquet, and the extremity fixed by assistants above and below the elbow—the operator thrusts a catling beneath the integuments and muscles of the fore-

arm, just below the condyles of the humerus, at the bend of the elbow, and forms a flap three inches in length, by cutting towards the hand. This flap being held back, he cuts through the integuments and muscles on the posterior side of the arm, by an incision level with the extremity of the olecranon. Then feeling with his left thumb for the head of the radius, he separates it from the humerus by directing his knife obliquely between the two bones, and removes the ulna by cutting round its sigmoid cavity, taking away as much of the capsular ligament as possible. The bleeding vessels being tied, the condyles of the humerus are covered by the flap, the edges of the wound approximated by adhesive plaster, and a bandage applied.

Amputation at the Shoulder Joint.—M. Lisfranc recommends the following method, which, if dexterously executed, is certainly the most expeditious; it however requires considerable practice to accomplish it skilfully.

Supposing the left extremity is to be removed; the patient is placed on an elevated seat, one assistant pressing the artery above the clavicle on the first rib, whilst another draws the arm forwards. The operator, standing behind the patient with a long bladed catling, pierces the integuments on the inner edge of the latissimus dorsi muscle, opposite the middle of the axilla, and pushes it obliquely upwards and forwards, till its point strikes against the under surface of the acromion; then by raising the handle of the knife its point is lowered, and protruded just before the clavicle, at the part where it joins the acromion. He then, by cutting downwards and outwards, forms a flap from the superior and posterior part of the arm, including the whole breadth of the deltoid muscle, and a part of the latissimus dorsi. This being held back by the assistant, the joint is cut through, by passing the knife between its articulatory from behind forwards, and a corresponding flap is formed by cutting downwards and outwards between the muscles and bone on the inner side of the arm. The vessels being tied, and the flaps placed in contact with each other, the operation is finished.

In operating on the right side, the patient should be seated on a low chair, and the catling thrust from above downwards, introducing it just before the point where the clavicle is connected to the acromion, and raising the hand backwards and downwards, till it appears on the inner edge of the latissimus dorsi, when the flap is to be formed, and the operation continued as before.

M. Richerand observes, "by this method a dexterous operator can separate the arm from the trunk as quickly as an expert carver detaches the wing of a partridge."

Critical Remarks on the London Pharmacopœia of 1809, *and the altered edition of* 1815; *with Suggestions intended to obviate the Objections made against attending to the Directions contained in the "Pharmacopœia Collegii Regalis Medicorum Londinensis;" submitted to the consideration of that Learned Body, and the Medical Profession in general.* By J. H. SPRAGUE, Esq. *Member of the Royal College of Surgeons, London, and of the Medico Anatomical Society of Bristol, &c.*

Mr. Sprague, after calling the attention of the public to the propriety there would be in the college taking into their consideration the observations made by Mr. Gray in his elements of pharmacy on the present weights used by the apothecary; and after having remarked on the first pharmacopœia of the college of physicians, compiled by Sir Theodore Tuquet de la Mayerne, and his unacquaintance with the usage in England, &c. he next refers to some of the various articles and preparations of the London Pharmacopœia, in the order of the work itself, offering, at the same

time, such suggestions respecting them, and such additions, as he trusts will be found calculated to be applied to a practical and beneficial purpose.

After these follows a proposed appendix to the Materia Medica; consisting of medical substances not yet admitted into the London Pharmacopœia, but which are certainly he (Mr. S.) thinks entitled to a place in the next edition, as there is sufficiently respectable testimony upon record to lead us to believe that they have been administered by different practitioners with the most beneficial effects. Among which are the following; viz.

Artemisia Santonica, Worm-seed. —" A strong decoction of worm-seed as an enema is particularly recommended by Mr. C. M. Clark, in his first volume on female diseases, as one of the best remedies that can be employed to destroy ascarides. I have frequently tried it myself, and can bear ample testimony to the correctness of Mr. Clark's opinion. The peasantry of South Wales give the worm-seed coarsely bruised, and mixed with honey, in the form of an electuary, as a common domestic medicine against worms, which is said to prove the most effectual remedy. Vide Decoctum Santonici.

Berberis Cortex, Inner Bark of the Barberry.— " Dr. William Hutchinson (late editor of the Medical and Physical Journal) informed me, that he had found an infusion of this bark particularly serviceable as an aperient in jaundice; and since his recommendation, I have also experienced from its use the most decided advantage in icterus, and other disordered states of the chylopoietic viscera, attended with a paucity of bile in the intestinal canal. Vide Infusum Berberis.

Cubebæ, Cubebs, or Java Pepper. —" Mr. Jeffreys has lately written " Practical Observations on the use of Cubebs in the cure of Gonorrhœa." Many other practitioners maintain a favourable opinion of its influence in the same disease. Dr. Macleod and Mr. Bacot (the present editors of the London Medical and Physical Journal) speak of it as " a very valuable medicine," and give the result of a correspondent's experience at Wolverhampton, which is altogether highly in favour of the remedy. It is observed, that " the pepper is rendered nearly inert, by remaining long in a powdered state, probably by the evaporation of its volatile oil." Vide London Medical and Physical Journal for October 1822, p. 357. This remark may account for its failure in some cases, and would seem to indicate the propriety of always giving it in the form of a tincture, which contains all its active qualities *unimpaired by keeping*. I have generally found cubebs speedily efficacious in gonorrhœa, when it was given early in the disease, and before the use of other remedies. It has also been found efficacious in leucorrhœa and in diarrhœa. Does it not, therefore, deserve to be restored to the list of the Materia Medica?—for it once had a place there. Vide Tincturam Cubebæ.

Daturæ Stramonii, Thorn Apple. —" Dr. Paris observes, in the Pharmacologia, Vol. II. p. 174, " It is narcotic, and has been regarded by many authors as eminently antispasmodic. Dr. Barton, an American physician, made very extensive trials of its efficacy, the result of which is highly favourable to its use; and I have been recently informed, by Sir Henry Halford, that he has found a tincture made of the seeds of a very efficient and unobjectionable preparation." Surely, after such assertions, it must gain admission into the next edition of the Pharmacopœa. Vide Tinct. Stramonii and Extr. Stramonii.

Iodina, Iodine. — " Iodine is a simple body, discovered in 1813, by M. Courtois, in the mother waters of soda, as it is obtained from the seaweed. The name of iodine is derived

from the Greek word *ἰωδὴς* on account of the blue colour of its vapour. Dr. Elliotson remarks, " Of the powers of iodine in bronchocle we have abundant testimony. I have seen sufficient to satisfy myself; and they would seem equally great in other structural diseases." Dr. Baron's experience of its efficacy is equally encouraging.—Vide Tincturam Iodinæ.

Iridis Flor. Radix, Orris Root.—" Every person who is practically acquainted with the pharmaceutical composition of pill masses, will, I doubt not, agree with me, that orris root ought to have a place in the Pharmacopœia, for the very great use of its powder in rendering various pill masses, into which soft extracts enter, of a proper consistence, and retaining them so. It is also one of the best substances for involving pills of calomel and other mercurial preparations. Liquorice, nor any other powder, will answer the purpose so well, as a trial will prove the correctness of.

Lactuca Sativa, Cos Lettuce, Inspissated Juice.—" Dr. Paris, in Pharmacologia, Vol. II. p. 209, remarks, " This preparation has not yet found its way into the London Pharmacopœia; but as considerable interest has been excited with regard to its sedative properties, by the testimony of Dr. Duncan and others, I may be allowed to introduce it in the present work." This remark, I should suppose, may be considered as precursory to its appearance in the next edition of the London Pharmacopœia. Prepared according to Mr. Probart's method, see Extractum Lactucæ Concentratum. Probart's Tinctura Lactucæ, and Troch. Lactucæ.

Rhodium Lignum, Rose Wood.—" See Dr. Mason Good's observations on its virtues, in his study of medicine, Vol. I. p. 136, where he speaks of it as a valuable remedy in flatulency, not only affording benefit for the time, but, by its tonic virtue, having a tendency to correct the disorder radically, which certainly renders it deserving of a place in the New London Pharmacopœia. For further remarks on its use, see Tinctura Rhodii.

Tiglium Croton (Oleum é Seminibus expressum).—" For its history and effects as a cathartic, I must beg leave to refer the reader to Dr. Paris's remarks, which he will find in the Pharmacologia, vol. II. p. 418—423, and to various papers in the Medical Repository.

(To be continued.)

M. DUPUYTREN'S CASE OF WRY NECK.

When this deformity is occasioned either by spasmodic contraction of one of the sterno-mastoid muscles, or paralysis of the other, it may sometimes be relieved by an operation. In a case of the former kind it would be requisite to divide some of the fibres of the diseased muscle; in the latter a sufficient quantity of the corresponding healthy one would require to be cut, in order to establish a uniformity of action between the two.

The history of the following case may serve as a guide in practising the operation, as well as one proof of its success.

A little girl about ten years of age, whose neck, or rather her head, had been awry for three years, owing to a permanent spasmodic contraction of the sterno-mastoid muscle of the right side, was admitted into the Hotel Dieu, Paris, early in January 1822. On the 16th of that month the operation was performed by M. Dupuytren as follows.

The patient reclining against an assistant, a puncture was made, with a straight narrow bladed bistoury, through the integuments just on the inner border of the sternal extremity of the contracted muscle. The blade of the bistoury, being flatly opposed to the muscle, was pushed cautiously behind it, the point being directed

forwards and outwards till it protuded just on the outer side of the clavicular border. The edge of the bistoury was then turned towards the muscle, and a sufficient quantity of its posterior fibers cut to allow of the head being placed erect: the instrument was then withdrawn.

In this way the integuments escaped being divided, and a future scar was prevented; a very desirable object, the patient being a female.

The cut edges of the muscles were kept asunder by depressing the clavicle, and inclining the head to the left side. The former was effected by binding the right hand firmly to the foot, the knee being bent; thus the clavicular fibres of the deltoid drew the bone downwards; the latter by a roller passed round the head and under the left axilla.

The patient was kept in bed; and at the end of the thirteen days the punctures were healed, and she had free motion of the neck, though from long continued habit, she still turned her face to the left side. The bandages were re-applied, and the same bodily position maintained, till the 21st of February, when they were finally taken away, and the patient pronounced cured, the head being but very slightly inclined to the right side, and having free motion in every direction.

In operating on the male, the fibres may be cut on the anterior surface of the muscle, an incision being first made through the integuments. Inclining the head to the opposite side by a roller, and filling the wound with lint, will then be sufficient to keep its cut edges asunder.

PATHOLOGY OF PALSY AND APOPLEXY.

(Journ. de Physiologie, Avril, 1823.)

M. Serres has commenced a series of interesting papers in this Journal, on the relation subsisting between the chief symptoms of these diseases, and the seat which the corresponding organic derangements occupy in the encephalon. He has found, by refering to authors, and also by frequent personal experience, that in apoplectics, when erection of the penis is a symptom during life, or is found in the dead body, the apoplectic cell is always deep in the cerebellum; that in paralytics the loss of motion of one arm alone is connected with derangement of the posterior lobe and posterior part of the middle lobe of the brain, and paralysis of one leg with a deposite either among the anterior radiations of the corpus striatum, or in the cerebellum; and that in every case of hemiplegic palsy without exception, the cell occupies the opposite side of the brain or cerebellum. It is a prevalent idea, he observes, that while an injury of a hemisphere of the brain causes palsy of the opposite side of the body, that of a hemisphere of the cerebellum paralyzes the same side. This idea, however, he finds to be erroneous; for in three cases of marked hemiparaplegia, he discovered a purulent cell in the opposite side of the cerebellum; and in numerous experiments on animals he invariably remarked, that an injury of a hemisphere or peduncle of the cerebellum impaired or destroyed the power of motion in the opposite side of the body. He allows that the reverse has been witnessed by others, and has the candour to quote against himself the respectable authorities of Helvetius, Plancy and Forestus. But he overcomes this difficulty by assuring us, that several years ago he did not hesitate to pronounce all their observations erroneous, and that he expects to prove them so to every body's satisfaction.

PROXIMATE PRINCIPLES OF THE BLOOD.

(Ann. de Chim. et de Phys. Mai 1823.)

M.M. Prevost and Dumas of Geneva, alledge that they have found the blood to consist of serum, holding in snspension regular insoluble corpuscles, which are composed of a

central colourless spheroid, and a sort of membranous sac, of a red colour, surrounding it. And they consider the coagulation of the blood to arise from "the attraction of the red matter round the white globules ceasing with the motion of the fluid, so that the white globules can obey the force, which tends always to unite them." The white globules are of course fibrine; and the red matter seems to them to be a kind of translucent jelly, insoluble in water, easily divided, but not capable of reunion. They have examined the proportion which the white corpuscles and red matter together bear to the rest of the blood, in a great variety of animals; and they find them most abundant in birds, next to the mammalia, especially the carnivorous mammalia; and they are least plentiful in the cold-blooded animals. In man they constitute about 129 parts by weight, per thousand. They are more abundant in arterial than in venous blood: one thousand parts of the arterial blood of the sheep, dog, and cat, contain 10 parts more of these particles than blood taken from the veins. The serum is identical in both. Their observations are many of them very interesting: the account they give of the coagulation of the blood, is evidently nothing but words.

ASSOCIATION OF APOTHECARIES, &c.

Subjects proposed for premiums by the Association of Apothecaries and Surgeon Apothecaries of England and Wales. The associated apothecaries have lately proposed a series of prizes for the best dissertations on different subjects of medical science. We fear, however, that there are few individuals who would take the trouble to compose an essay for the insignificant reward of ten guineas, especially as the candidate is informed that the fruits of his labours, should his be the successful essay, are to be published for the benefit of the association, and that he is not permitted to re-publish it "until twelve months after the original publication of it by the association:" the terms are so favourable to the association, whilst at the same time they hold out such a trifling recompence to the successful candidate, that we should not be surprised to hear that no aspirant for the prize had offered himself.

The following are the subjects proposed for the premiums:—

1st. For the best original essay on the subject of medical education, in which the relative importance of the various accessory sciences is ascertained, and the extent to which each separate science or branch of general knowledge should be cultivated, to afford the highest degree of usefulness in the healing art.

2nd. For the best experimental essay on inflammation. The number, accuracy, and practical importance of the facts and inductions communicated, will form the basis on which the respective merits will be appreciated.

For the assistance of the student, the principal desiderata may be stated:—

1st. To ascertain the actual changes which take place in the various tissues, or textures of which the body is composed, when suffering from inflammation, particularly in the condition of the nerves and blood-vessels.

2nd. The order in which the phenomena occur.

3rd. The means by which the morbid changes have been induced.

4th. The remedial means which have been found the most efficacious in restoring the natural condition of the inflamed parts.

5th. Illustrations by preparations, drawings, or models, are recommended to the attention of the candidates as giving increased value to accurate verbal description, although they are not insisted on as essential.

The essays which obtain the premiums, to be published by the asso-

ciation. The author of each essay will be furnished with fifty copies for private distribution. The author not to republish the essay until twelve months after the original publication of it by the association. Essays not to be in the hand-writing of the candidate, nor to bear his signature; but the name and address to be sealed and enclosed with an external motto and device, corresponding with that attached to the essay.

Unsuccessful essays to be returned with the seals of the packet, containing the name, unbroken, if so desired by the candidates.

Essays to be written in English or in French, and to be transmitted to the secretary, or to the president, free of postage, on or before the 1st of May, 1824.

Each successful candidate may receive, at his option, a gold medal, with an appropriate inscription, or the sum of ten guineas.

The rewards to be delivered to the successful candidates at the general meeting of the association, the first Wednesday in July, 1824.

MELANGE.

On the use of Arsenic in Chorea, by DR. SALTER.—This gentleman has briefly described four cases of chorea, cured by the employment of the *liquor arsenicalis*.

Case 1.—A girl 17 years of age, in whom the disease had continued for three months, employed this remedy in the dose of four drops, three times a day, augmenting the dose by one drop each day. The medicine was continued for four weeks without producing the least derangement in any function of the body.

Case 2.—A girl nine years of age, whose disease had been produced through the agency of fear, began the employment of the remedy by three drops three times a day. She could not bear the dose to be carried higher than seven drops. She was completely cured in four weeks.

The *third and fourth cases* occurred in two young people, one 12 years of age, the other 14: they were both cured by the same means. *(Rev. Med.)*

Vegetable Alkali from Rhubarb.—M. NANI of Milan, states that he has discovered a new vegetable alkali in rhubarb; but he has not said much of its properties, and, except its solubility in weak sulphuric acid and precipitation by lime, no evidence of its alkaline nature is offered. Six ounces of rhubarb in powder, were boiled for two hours in eight pints of common water, with four drachms of sulphuric acid; this was filtered, pressed, and the residuum re-boiled with six ounces of water and two drachms of sulphuric acid; the fluid being again separated, the residuum weighed but two ounces. The united fusions were mixed by degrees with three ounces of quick lime, and from being yellow they became of a blood red colour; after standing for a day the precipitate was filtered out, dried in the sun; and weighed six ounces. It was then digested at a high heat, with four pounds of alcohol s. g. 837 for two hours, filtered and again digested with two pounds more of alcohol, which, when separated by a second filtration, was added to the first. Being put into a retort, five pounds of alcohol were distilled off, and the rest of the liquor carefully distilled to dryness. The residuum weighed two drachms, was of a red brown colour, with brilliant points throughout it. Its taste was sharp and styptic. It was soluble in water, and its odour like that of rhubarb. This preparation is recommended as being of constant quality, of convenient solubility in water, and deprived of its inert and ligneous matter; one or two grains is said to be sufficient for a dose.

PROGRESS OF LIBERTY.

The following is copied from the *Colombiana;* Caraccas paper.

In the year 1773, (48 years ago) the number of free men, that is, of men living under free governments were—

In the British dominions, about	12,000,000
In Holland	2,300,000
In Switzerland	1,500,000
Total number enjoying freedom in 1775	15,800,000

At this time the numbers are very different, viz.

British Subjects in Europe	16,000,000
United States of America.	11,000,000
French	29,000,000
Dutch and Netherlands..	3,000,000
S. America Repub. about	13,000,000
The Brazils	3,500,000
Spain	9,000,000
Portugal	2,500,000
Total, enjoying freedom in 1823	87,000,000

Thus eighty-seven millions have arisen from fifteen in less than fifty years; and say arisen from, for the seeds of liberty have been carried from one country to another, as visibly as ever animals or plants were produced from the parent stock. The United States received their principles of freedom from Britain, and France her's from the United States. Spain owes her efforts in the cause of freedom to the French revolution, and South America to the United States. Had not the unfortunate inhabitants of Switzerland lost their liberty (not in name but in substance) the number of people enjoying freedom in 1823 would have been nearly six times as many as in 1775. The cause of freedom is in abeyance in Naples, Sicily, and Savoy: but it will not long be so.

Professor Silliman's Account of a Toad.—The workmen engaged in blasting a rock from the bed of the Erie canal, at Lockport, in Niagara county, lately discovered, in a small cavity in the rock, a toad in the torpid state, which, on exposure to the air, instantly revived, but died a few minutes afterwards. The cavity was only large enough to contain the body without allowing room for motion. No communication existed with the atmosphere, the nearest approach to the surface was six inches through solid stone. It is not mentioned whether the rock was sandstone or limestone, but from the prevalence of limestone on the surface of the contiguous country, it may be presumed to be the latter. The country is wholly of secondary formation. Of the causes which enable animals of this class, which have been suddenly enveloped in strata of earth or otherwise shut out from the air, without injury to the animal organ, to resume, for a limited period, the functions of life on being restored to the atmosphere, no explanation need here be given, as the occurrence is a very common one, and is, perhaps, always more or less the result of galvanic action.—*Silliman's Journal.*

Of the Chemical Composition of the Strychnos Pseudo-kina. By M. VAUQUELIN.—On his return from Brazil, M. Saint-Hilaire sent M. Vauquelin the bark of a plant, which that enlightened traveller has named *strychnos pseudo-kina*, with the intention of determining whether it contained any of the principles of *cinchona*, whose properties it appears to possess, or of *strychnos*, with which it is allied by its botanical characters. The following is the result of M. Vauquelin's analysis:—

1. A bitter matter, which constitutes the chief part of its soluble constituents, and which possesses the febrifuge properties of the plant.

2. A resinous substance of a particular nature, very soluble in alcohol of 36°, and but little soluble in pure alcohol.

3. A coloured gummy substance, united to an animalized principle, which modifies its physical properties.

4. A peculiar acid, which, like the infusion of gall-nuts, precipitates

the sulphate of iron and gelatin, but with such modifications as to prevent its being confounded with gallic acid.

This analysis is remarkable, as it shows the absence of strychnine and of quinine from the bark of a plant which belongs to the genus strychnos, and possesses the properties of cinchona.

HOSPITAL REPORTS.

ST. THOMAS'S.

Nov. 7.—Mr. Travers operated for the stone on a young male subject (about 4 years old.)

TALLICOTION OPERATION.

This rare operation was performed here to-day in a very neat and ingenious manner by Mr. Travers. A portion of the integuments over the left superciliary ride were dissected from the forehead and brought down, suspended by a small attachment, to form the nose. In our next week's number, we purpose to give the history of this operation, with a full detail of the present case, &c.

GUY'S.—Sir Astley Cooper, Bart, operated for stone.

Metereological Society of London.

A meeting was lately held at the London Coffee-House, Ludgate Hill, to take into consideration the propriety of forming a Metereological Society. Dr. Birbeck was in the chair; and it was agreed that the society shall be conducted by a president, vice-presidents, treasurer, secretary, and council; that two guineas be paid annually, in advance, by each member; that no other qualification be required to constitute eligibility to this society, than a desire to promote the science of metereology, &c. &c.

MILITARY PROMOTIONS.

From Saturday Night's Gazette, Oct. 31.

Windsor Castle, Oct. 28.—57th Reg. of Foot. Assistant Surgeon William Latham, from half-pay of the 34th foot, to be Assistant Surgeon, vice Inglis, deceased.

HOSPITAL STAFF.—Surgeon John Maling, from half-pay, to be Surgeon to the Forces, vice Clarke promoted.

Assistant Surgeon Henry Clifford, from half-pay of the 68th foot, to be Assistant Surgeon to the Forces, vice Peter Finlayson, whose appointment has not taken place.

Hospital Assistant Michael Gallaghee, from half-pay, to be Hospital Assistant to the Forces, vice Thomas Lough, who retires upon half-pay.

MARRIAGES.

On Monday, 20th ult. at St. Mary's, Newington, Mr. O. G. Williams, of the firm of Ankers and Williams, Surgeons, &c. Great St. Thomas' Apostle, to Sarah, eldest daughter of William Hughes, Esq. of Walworth.

On Friday se'nnight, Mr. H. Edwards, of Newgate Street, Surgeon, to Mary, youngest daughter of S. M. Mitchell, Esq. of Union Court, Fleet Street.

BIRTHS.

TRIPLETS.—On Tuesday last, (Oct. 28) Margaret Crawford, of the *Low* Street, Sunderland, was delivered of three illegitimate children—viz. two boys and one girl, all of whom are likely to do well.

OBITUARY.

Died, on Friday se'nnight, after two days illness, aged 86, Mr. W. Hutcheson, formerly an eminent Surgeon at Lynn, in Norfolk, but many years retired from practice.

On Tuesday se'nnight, aged 56, Mr. Robert Lathangue, sen. Dispenser to the Hull and Sculcoate's Dispensary.

TO CORRESPONDENTS.

CRITO's *explanation has not been called for, and as the time has transpired, we shall have no occasion for it now.*

PHILO-CHIRURG. *is under consideration—we have no objection to receive similar effusions, to which justice will invariably be done.*

We feel obliged to M. D. of Bath; his remarks are not without truth—the cause does not immediately exist with the Editorial department. We shall, nevertheless, endeavour by every possible means to prevent a repetition of the subject to which he calls our attention. We beg leave, at the same time, to thank M. D. for his urbanity and liberality.

A. C. is requested to call or send his address to the Publisher's.

In answer to N. N. N. we can assure him that his friend X. X. will not be in town till after Christmas.

All Communications, Advertisements, &c. (post paid) addressed for the Editors, at the Publisher's, &c.

London:

Printed by E. JUSTINS, 41, *Brick Lane, Spitalfields.*

Published by COX and SON, St. Thomas's Street, and 39, High Street, Southwark. Sold also by Sherwood, Neely, and Jones, Paternoster Row; Simpkin and Marshall, Stationers' Court; John Cox, Berner's Street, Oxford Street; Callow and Wilson, Gerrard Street, Soho; W. Stewart, South Bridge Street, Edinburgh; J. Cameron, opposite the College, Glasgow; Hodges and M'Arthur, Dublin; &c. &c.

THE WEEKLY

MEDICO-CHIRURGICAL & PHILOSOPHICAL MAGAZINE.

No. XLI.] SATURDAY, NOVEMBER 15, 1823. [*Price 4d.*

" FLORIFERIS, UT APES, IN SALTIBUS OMNIA LIBANT
OMNIA NOS, ITIDEM, DEPASCIMUR AUREA DICTA."

CONTENTS OF THE MEDICO-CHIRURGICAL TRANSACTIONS, *just published.*

(Continued from page 243.)

Mr. LANGSTAFF'S *Observations on the case of Ascites connected with Utero-gestation.*

Mr. Langstaff observes, that during an extensive practice for the last thirty years, he has occasionally seen slight cases of ascites and frequently severe cases of œdema, connected with, and occasioned by the morbid changes in the constitution, which utero-gestation had produced. They all terminated favourably by suitable medical treatment, either previous to, or soon after parturition. The case in question gave Mr. L. particular anxiety during his attendance, not only from its novelty, but from the high esteem he had for the family of the lady. " I spared," says he, " no pains in obtaining the opinions of some of the most scientific and distinguished accoucheurs in London, particularly those who have been for a number of years extensively engaged in this department. I also conversed on the nature of the case and proper mode of treatment, with some of the most eminent surgeons and pathologists, none of whom unfortunately had ever seen a case of dropsy, during pregnancy, that required tapping; and all seemed too cautious to sanction this operation, lest it should occasion, or be succeeded by puerperal inflammation, which, in all probability, would destroy life. I likewise referred to a great number of books on midwifery, published in this country, without finding any thing on this point satisfactory or encouraging. In the celebrated Dr. Denman's Introduction to the Practice of Midwifery, Vol. I. p. 290, 4th Edit. I read as follows :—

" There have been a few instances of women with child, who have had a true ascites; and those who have ascites sometimes become pregnant. Some cases are recorded, and many reported, in which the mode of treatment enjoined has been founded on an erroneous opinion of these two situations; that is, of a dropsy being mistaken for pregnancy, and pregnancy for dropsy. The former is not productive of mischief in any other way, than by delaying the use of such means as might be considered likely to cure the disease, if administered in its early state. But the consequences of the second error have been deplorable: for, if any active remedies are used on the presumption of a dropsy, the child will of necessity be either destroyed, and an abortion, or premature labour occasioned; and, when the operation of the paracentesis has been performed, it hath been known to prove fatal to the mother and child, always reflecting great discredit both upon the operator and the profession. It therefore seems necessary to establish this general rule; that no woman, at a time of life, or under circumstances which, in the most distant manner, subject her to a suspicion of pregnancy, should ever be tapped, or otherwise treated for dropsy, till by examination per vaginam, or by waiting a due time, we are convinced she is not pregnant, even though she may have before undergone the operation."

Mr. Langstaff seems to think that the above quoted opinion at one period of his life might, perhaps, have deterred him from operating in such a case; but as tapping, in this instance, appeared to be the only chance of saving the patient's life, and not having so much dread of its consequences as were anticipated by others, although well aware of the susceptibility of the peritoneum to take on inflammatory action during the last stage of gestation, and soon after parturition. Yet Mr. L. proposed the

operation with great hope of success, after reading a case of the kind treated successfully by the celebrated Scarpa,* whose name will be revered by posterity as a distinguished surgeon, anatomist, and pathologist.

"From the favourable result of these cases I should," continues Mr. L. "in a similar one, be induced to recommend tapping before the hydropic symptoms became so distressing: and from what I have seen of dropsy occasioned by plethora, or an inflammatory state of the arteries, I should expect that the further effusion of the fluid into the peritoneal sac during pregnancy, might, if detected before the accumulation was considerable, be prevented by blood-letting; and, ultimately, the absorbents induced by proper treatment to carry off the fluid. But this fortunate termination could only be expected where effusion was merely the result of simple inflammatory action, unconnected with visceral disease. On this subject, however, I shall say more when I publish the History of my Museum, which I have in a state of forwardness.

Further Account *of the* Extraction *of* Calculi *from the Bladder, without the use of any cutting Instrument. By* Sir Astley Cooper, Bart., F. R. S. Surgeon to his Majesty, *and Surgeon to Guy's Hospital. (Read November* 19, 1822.*)*

"In a former volume of these transactions, I had the honour," says Sir Astley, "of stating that an idea had occurred to my mind, that calculi might be extracted from the bladder by means of forceps introduced by the urethra; and that by the ingenuity of Mr. Weiss, surgeons' instrument maker, I was provided with an instrument† well calculated to carry my idea into effect. From the Rev. Mr. Buller, of Barnwell, Cambridgeshire, I extracted more than eighty calculi; but I had not flattered myself with the hope that opportunities of using this mode of relief would often occur, and I have, therefore, received great additional gratification from being able so soon to add three cases to my former account, for one of which I am indebted to my excellent and intelligent friend Mr. Brodie.

The patient in Mr. Brodie's case was a gentleman aged 70: he had a frequent desire to void his urine, the act of voiding it was attended with more or less difficulty, so that he sometimes required the introduction of the catheter; he had a good deal of pain during and after each attempt to make water; and at different periods, he had passed several small oval calculi. He consulted the late Dr. Baillie, who referred him to Mr. Brodie for the purpose of having his bladder examined. Calculi were perceived in the situation of the prostate gland, apparently contained in one cyst, and sliding on each other, under the pressure of the finger, which in a consultation with Dr. Baillie, it was determined that Mr. Brodie should attempt to extract them, as they seemed to be of a moderate size, in the manner described by Sir A. Cooper in Vol. XI. of the Medico Chirurgical Transactions. On the first introduction of Weiss's forceps, two small calculi only were removed; but the second attempt was more successful, and as many as six or seven, of a larger size, were brought away. The operation was repeated ten or twelve times at various intervals, between the middle of June and the end of July; and in all, about sixty calculi were extracted, of various sizes, a few of which were not larger than a pin's head—a great number of the size of ordinary peas, but of an oval shape, and some of them considerably larger. The largest measured half an

* The case above alluded to is given, accompanied by Scarpa's Remarks, in the first volume of Quarterly Journal of Foreign Medecine and Surgery, p. 249.

† See drawings of these instruments, with a descriptive account of them, in No. 2 this Magazine, p. 237.

inch in one diameter, and five-eighths of an inch in the other, and had four sides and angles, and it was not until after two or three trials that the operator succeeded in removing it, in consequence of its bulk being considerably diminished, by the fragments which, at each effort, were brought away. Another calculus at a short subsequent period was extracted, which was lodged in the membranous part of the urethra. It was of an oval form, about the size of a small horse-bean.

The same gentleman passed some short time afterwards, three other round very large calculi, which, for some time tormented him very much. One was squeezed out of the urethra by the finger, the other two were passed the same night in making water.

The following case is in part detailed from the patient's account of his symptoms, and in part from the statement of Sir Gilbert Blane, who is the patient's physician.

Case II.

Sir William B——'s account of his Case.

"Sir William B. is in his sixty-seventh year: he suffered much at times from long and severe attacks of gout, from about his thirty-fifth to his sixtieth year; since which period, the attacks have been much less frequent, much mitigated, and of short continuance. He thinks he first perceived red gravel or sand to come from him occasionally, soon after a long fit of the gout, about seven or eight years since, but did not suffer much inconvenience from it. About four years since, he passed pieces of gravel at different times, and has continued occasionally to do so ever since, sometimes larger than a pea, but generally of an oblong shape. When they occasioned any stoppage in the passage, he used a hot-bath at 94°, and drank plentifully of some diluting drink, which after a little time, succeeded. In the summer of the year 1820, having had occasion to use a great deal of walking exercise in London for three or four days, he was much surprised on passing, first, a considerable quantity of very dark stuff, nearly like coffee grounds, and afterwards, a considerable quantity of what appeared chiefly blood. He did not experience any pain of consequence with this, and by the following day, his urine was as clear as before. Upon going into the country, he found that if he rode fast at any time, it brought on the passing of the dark stuff, and afterwards, if persisted in, of blood. By degrees he gave up riding, and finally ceased to ride about Christmas last; and finding the same effects to arise, in a slighter degree from walking much, he has very much given up that also, for the last six months. Sir Astley Cooper, and Sir Gilbert Blane, attended him for these symptoms in June and July, 1821, when he left London for Ireland. Whilst there he continued to experience the same inconvenience as before, but with little pain, and the same on his return to London. Early in June last, he called on Sir Astley Cooper, to say he was going again to Ireland, and wished to have some conversation with him, when Sir Astley Cooper advised his being sounded, which he then was, and it was ascertained there was a stone. As it appeared to Sir Astley Cooper to be a small one, he proposed trying to extract it, and on the fourth trial, with intervals of a week or so between them, a stone weighing seventeen grains and a half was extracted. About three weeks after, Sir William, having some fear that there still remained some stone behind, again applied to Sir A. Cooper, who, upon sounding, found that such was the case; and on making at that time an attempt to extract, at his own house, he brought it part of the way, but found it too large to bring forward, and therefore returned it; and as soon as the parts would permit, he

commenced enlarging the passage by bougies, which he continued at intervals for nearly a fortnight, and then extracted a stone weighing fifty-four grains, on the 28th of August, 1822."

(To be continued.)

SEILER AND OTHERS ON THE TEMPORARY LIGATURE OF ARTERIES.

M. Seiler's treatise consists, in the first place, of a German translation of the letters of Professor Scarpa and Vacca Berlinghierri on the ligature of the larger arteries, and in the second, of a series of experiments which he performed for the purpose of deciding on the merits of their different opinions, and particularly on the principal point disputed, namely, whether in the case of an artery tied with a flat ligature and a cylinder, there be a risk of its laceration by the ligature or by suppuration, and of consequent hemorrhage, notwithstanding the ligature should have been removed on the fourth day. The experiments of M. Seiler lead him to answer this question in the negative, and to favour the proposal of Scarpa.

He concludes, from his experiments on men and animals—

1st. That the closure of arteries occurs with nearly equal stability and perfection, whether the coats be preserved entire by the use of the flat ligature and cylinder, or whether the two inner ones be lacerated by the employment of the round ligature.

2d. That if the ligature be removed on the fourth day, the coats of the artery remain entire, provided they be of the usual size and thickness, have not been too tightly tied, and not unnecessarily detached from the surrounding parts.

3d. That the possibility of preserving the coats of the vessel entire, affords a great security in the treatment of aneurism, from their being frequently diseased.

4th. That the possibility of removing the ligature is equally advantageous, not only by diminishing the suppuration, but also by lessening the risk of inflammation extending to the heart. The experiments of M. Seiler, at least on arteries of equal size with those of the human body, do not confirm the assertion of Professor Vacca, that the vessel is divided by the progress of ulceration, even though the ligature be removed. In dogs, he confesses that the assertion is correct. In other animals, on the contrary, he found the surface of the artery covered with granulations, and confounded with the surrounding parts. He states, that the arteries of dogs are more easily lacerated than those of the human subject, and of other animals, and that they may be divided by the tightening of a round ligature; can he be ignorant that this is the case in man also?

5th. That there is no foundation for the objection made to Scarpa's process, that of causing irritation in the wound, as the size of the cylinder is insufficient for that purpose.

6th. That occasionally the coats of arteries are so yielding as to be divided by the application of a round ligature; and that in such instances Scarpa's plan with the cylinder and flat ligature certainly prevents the laceration. His observations on the mode in which an artery is obliterated, agree in general with the statements of Dr. Jones,* except that he has not always found the vessel closed from the point of ligature to the origin of the nearest branch; he has, on the contrary, occasionally observed the continuity of the artery interrupted by a simple cicatrix, corresponding to the spot at which the ligature was applied.

7th. That the arguments and facts in favour of Scarpa's method justify us in continuing to employ it, and to consider it as the most likely means

---

* *See* Medico-Chirurgical and Philosophical Magazine, (No. 39), Sir A. Cooper's Lecture, "*on the appearances which parts assume under the adhesive inflammation.*" pp. 228 and 9.

of bringing the Hunterian operation to perfection.

The object of Professor Scarpa's letter to Dr. Omodei is to recommend the employment of an apparatus, which he has invented for removing the ligature at the end of a few days, without any danger of disturbing the wound, or injuring the coats of the artery, which were, in fact, among some of the strongest objections urged against his operation by its opponents, and particularly as the means hitherto recommended for that purpose by Roberts and Giuntini, viz. a thread placed between the ligature and the artery, as practised by the former, or attached to the cylinder as by the latter, did not remove the necessity of lacerating the wound by the introduction of the finger.

The apparatus consists of two simple instruments, of which the first is a grooved director. Within the groove common to instruments of the same description, it presents another, which is merely an angular fossa, and is just capable of receiving the edge or point of a knife. For the extent of nearly an inch at the lower end of the instrument there is a narrow longitudinal fissure, open below, and continuous above with the line of the narrow groove. Two rings are attached horizontally to one side of the instrument, their diameter being proportioned to the size of the ligature on the artery.

The second instrument consists in a scalpel, with a convex cutting edge, its length not exceeding five lines, and so thin as to pass easily into the narrow fissure at the bottom of the grooved director. The point is blunted so as to move readily upwards and downwards in the narrow groove of the sound, and at the base of the blade is a bar or impediment, which prevents the knife from passing above a certain distance through the fissure at the bottom of the director.

When it is intended to remove the ligature, the instruments are employed in the following manner. The end of the ligature hanging out of the wound is passed first through the lower, and then through the upper ring of the director. The ligature is next moderately tightened, and the director introduced along it to the bottom of the wound, so as to be in contact with the cylinder on the artery. To keep it in that position the ligature is twisted round the top of the director which has a projection for the purpose. The director being so placed that the fissure in it corresponds to the course of the artery, is to be held in one hand, whilst the operator takes the knife in the other, and passes it perpendicularly, into the wound along the groove, and by that means into the fissure of the director, the ligature on the artery then lying transversely below it. The operator then by a slight pressure and motion of the knife edge, divides the ligature on the cylinder, and makes himself assured of it by finding the other end of the ligature yield.

(To be continued.)

Some Account of the Professional Writings
Of the late WILLIAM HEY, Esq.

(Continued from p. 212.)

Mr. Hey gives two cases of "collections of pus in the vagina" in the nineteenth chapter, which were cured by opening the cysts. In the first case the matter appears to have been contained in a cyst formed in the labium pudendi on the left side. These purulent collections in the labia pudendi are not uncommon; nor are they confined to women who are, or who have been, married; but it is probable that they never appear till after the period of menstruation. They differ from the common abscess in having a regularly formed cyst, smooth and shining on its interior surface; and when neglected they become fistulous. The dissecting out of the sac is undoubtedly an effectual mode of preventing a recurrence of the disease; but a crucial incision, and dressing the

wound carefully to its bottom, will generally effect a radical cure.

In the second case the cavity of the cyst was connected with the urethra: it was cured by a longitudinal incision and dressing the cavity to its bottom.

Chapter the twentieth. "On alvine concretions." After the recital of two cases, one of which proved fatal from the bulk of the concretion, Mr. Hey proceeds thus: "My principal design in taking notice of this disease was to relate a case, which, whether we regard the history of the symptoms, or the method of cure, will not, I hope, be thought uninstructive." This is a very interesting narrative of a case of obstinate constipation subsequent to parturition, in which, after the usual methods of treatment had failed, and every injection returned immediately, relief was given by introducing a long flexible catheter beyond the obstructing mass, and conveying the injections through this tube: the feces had become dry, and assumed the appearance of bran.

Chapter the twenty-first contains some useful observations on the atheroma.

Chapter the twenty-second. "On deep-seated abscesses of the mammæ." The abscess described by Mr. Hey is one in which "the matter sometimes lodges behind the mammæ as well as in the substance of that gland." "The cavities formed by the matter are often numerous, running in a variety of directions; and, when opened, are found to be in part filled with a soft fungus of a purple colour." The treatment consists in dividing all the sinuses freely, whatever may be their depth or extent.

Chapter the twenty-third. "On amputation." The directions given by Mr. Hey in the two first sections, concerning the mode of amputating the upper and lower extremities, are most accurate and perspicuous. In his method of operating, attention is given not only to the success of the operation and to the safety of the patient, but to his future comfort by rendering the stump as useful as circumstances will permit. The third section of this chapter describes the mode in which he conducted the "excision of the metatarsal bones." When the metatarsal bones were in a carious state, Mr. Hey first removed the toes, then "separated the four smaller metatarsal bones at their junction with the tarsus, with the scalpel," having previously separated the integuments and muscles forming the sole of the foot, from the inferior part of the metatarsal bones. The projecting part of the first cuneiform bone which supports the great toe, he was obliged to divide with a saw. Having secured the arteries, he applied the flap which had formed the sole of the foot to the integuments which remained at the upper part, and retained them in contact by sutures. The wound was healed in little more than a fortnight; the mutilated foot was but one inch shorter than the sound foot, and the patient was soon able to walk with ease and firmness.

HEADS OF SURGICAL LECTURES, *delivered by* SIR A. COOPER, Bart. *at* ST. THOMAS'S HOSPITAL.

(Continued from page 246.)

November 12.—ON GRANULATION.—"Granulation (the second mode of union) is a new formed substance, red in colour, having the power of secreting pus. Granulations are produced in the following manner—when the abscess is opened, inflammation takes on and fibrine is effused, which forms a layer on its internal surface; vessels shoot into it, rendering the whole surface highly vascular. These vessels open on the external part of the coagulable lymph, terminating in the middle or internal surface—from the orifices of these vessels, is deposited another layer of lymph, and thus layer after layer is formed, until the whole cavity of the abscess is obliterated. The vessels shooting into granulations are exceed-

ingly numerous, and consist principally of arteries. Granulations are rendered vascular by the radiated branches of arteries that shoot into them; and these vsssels pour out pus as well as fibrine—herein consists one of the differences between the mode of union by granulation and that of adhesion—in the latter the vessels do not pour out pus from their orifices—in the former, they give out pus at the same time that coagulable lymph is effused. A gland is a part of the body in which there is a secretion taking place, and which has a vein and an artery to carry the blood to and from it—and that part of the blood which is not turned into pus is carried back to the heart. Recent formed granulations have bad absorbent surfaces. But this is not the case with old sores or ulcers, which readily take up any mercurial preparation that may be applied to them—not unfrequently to that degree as to effect the mouth; but when this occurs, it indicates a constitution easily affected.

"Ulcers are not unseldom productive of beneficial as well as of bad consequences. Arsenic is a remedy that should be employed with extreme caution—it is a very dangerous application. Many instances are recorded of its pernicious as well as its destructive effects; producing general paralysis and death, &c. &c.

"Opium applied to the surface of a sore is very readily taken up into the system. The extract was applied by Mr. Lucas to the stump of a child, after amputation, with considerable benefit. It has, in fact, much the same effect when applied to the surface of a sore, as when taken into the stomach: and its effect is regulated by the length of time that sore has existed.

"Granulations appear tender, and seem endowed with great sensibility, —and this is actually the case as far as regards those on the skin, but it is not so with those on other parts of the body. Granulations, for instance, on bony surfaces, after exfoliation has taken place, possess little, if any, sensibility unless in the inflamed state. Those springing from the cancellated structure are exceedingly sensible. The want of sensibility in granulations is also applicable to those formed on tendons, and on aponeuroses, *e. g.* those on the tendo achilles are insensible.

"Granulations very readily unite when brought in contact with each other, by the adhesive process, in the same manner as the edges of a recent wound, *e. g.* those which form on the scull after a lacerated wound of the integuments, on the periosteum, scrotum, &c. It is upon the plan of approximation that Mr. Baynton's method succeeds so well in the healing of ulcers.

Cicatrization.—When the granulations have become parallel with the surface of the surrounding parts, or a little above them, then the process of cicatrization commences, by new skin forming over its surface, a process depending upon the innosculation of the edges of the granulations which form on the edge of the old skin. There is a gradual and uniform contraction from the sides to the centre of a wound. The radiations of the new-formed vessel concentrate upon the sore, that is, they converge from the centre to the circumference. This had been denied, although it is evident when the contrary is the case, it is in consequence of the absorption of new skin leaving an isolated portion in the middle of the sore which forms new granulations on its sides which shoot towards the edge of the sores meeting those coming from it. The readiness of a sore to close depends much on its form—a longitudinal wound cicatrizes sooner than a circular one. As soon as a sore begins to cicatrize, the surrounding skin becomes smooth and assumes that whitish cast so frequently observed, with a similarly coloured substance. New-formed skin is less

yielding, less elastic and moveable, also thinner and more tender than the originally formed cutis, and becomes more firm and denser. Sores are also more or less difficult to heal according to their situation—one on the back of the leg is more difficult than on a different surface. These are assisted by approximating the parts by raising the heel to relax them. The cuticle is easier formed than the rete mucosum, as has been remarked in negroes—still both are re-produced.

"It every now and then happens, that after considerable scalds and burns persons are very much disfigured in consequence of the contractions of the skin after the parts are healed; which is a kind of after process. It often happens also that such contractions are incapable of cure, *e. g.* in cases where the chin is united to the breast—although the bridle may be divided and the head kept back as much as possible, the cicatrix nevertheless contracts again —those of the joints may be remedied by using splints, viz. in the elbow and when the thigh is contracted upon the abdomen, &c. &c.

"In the formation of a new skin, as in the closing in of the cavity of an abscess or wound, the substance restored is similar to that which was lost. All the parts of the body are re-produced except two, viz. the muscles and ribs. In the former the union or re-production is formed by tendinous substance—in the latter, when their cartilages are divided they are united by bony matter. In young subjects, however, cartilage is commonly re-produced — tendons are readily re-produced — these re-productions seldom take longer than a fortnight or three weeks; as in rupture of the tendo achilles—the parts re-produced in tendons are always larger than the original structure—bones in like manner, not only the shell of the bone, but also the cancellated structure, as well as the earthy matter (phosphate of lime), &c. Nerves are also re-produced,—when, for instance, one of the facial nerves in tic doloreux is divided, it unites again, &c. &c. It still remains to be ascertained whether the nerves do not anastomose, carrying the sensation communicated to their trunks beyond the seat of division, &c. &c.

(*To be continued.*)

M. SPRAGUE'S PHARMACOLOGICAL REMARKS AND SUGGESTIONS.

(Continued from page 251.)

Having comprised all the articles and preparations of the Materia Medica to which the attention of the profession is called, Mr. Sprague endeavours next to obviate any unfounded objection that may be made against multiplying our officinal formulæ.

"In my humble opinion, a Pharmacopæia inclusive of the Materia Medica ought to constitute a standard work of reference, giving precise and scientific directions for accurate composition of every chemical preparation, and of those more particularly denominated Pharmaceutical. It also should comprise the recipes for other approved medicines, under the classification of *extemporaneous* formulæ. By such an arrangement, all the preparations would, with much propriety, be comprised under two principal divisions, viz. officinal preparations and extemporaneous formulæ. The first should always be kept prepared in the shop of the Apothecary, for the purpose of forming the latter. The admission of extemporaneous compositions into the Pharmacopœia has been already anticipated; for the *decoctions*, *infusions*, *mixtures*—several of the *liniments*, *mucilages*—some of the *ointments*, *pills*, *plasters*, &c. must be regarded as extemporaneous.

"When it is considered how many are incompetent to prescribe with elegance and effect, surely the Pharmacopœia should be referred to as a guide to direct the practitioner to the most efficient extemporaneous formulæ or compositions. This would

much abridge the labour of the Physician in prescribing, as the work would contain some of the best remedies against disease, in the most useful state of combination. Keeping these principles in view, the extemporaneous formulæ of the College, I think, may be augmented with much usefulness and propriety.

The Officinal Preparations and Compositions come first in order. They are as follows:—

ACIDUM ACETICUM.

"On account of the diluted state of the acid, this preparation should be named acidum aceticum dilutum, to correspond with the nomenclature of acidum nitricum dilutum and acidum sulphuricum dilutum. Nothing can be more improper than the name given to it by the London College, as vinegar varies so much in strength. The college would act very judiciously in directing it to be prepared with the concentrated acetic acid, similar to a preparation manufactured by Beaufoy and Co., so much praised by Dr. Paris; and which is ordered by the makers to be diluted with distilled water, as in the subjoined formulæ. I have not an acetometer at hand to ascertain the relative strength of the acid, and therefore can only allude to the proportions directed by those persons, who at present exclusively monopolize by secrecy the manufacture of the article.

Acidum Aceticum Dilutum.

℞ Acidi Acetici Concentrat. Oj.
Aquæ Distillatæ, Ovij. Misce.

The above proportion of acid to the water makes diluted acetic acid of the same standard strength as the distilled vinegar of the London Pharmacopœia, and forms a unique preparation, answering all the purposes for which it is required.

I shall treat of several other acids and other preparations, which are deserving a place in the Pharmacopœia, in an Appendix to those sanctioned by the College.

ALKALIES AND NEUTRAL SALTS.

"The title of this section in the London Pharmacopœia is *Alkalies and their Salts*; but as these salts cannot be termed salts of alkalies in strict language, it would be preferable to translate the phrase neutral salts."

Liquor Ammoniæ.—The preferable process of procuring the liquor ammoniæ is that recommended by Mr. Phillips, and is as follows:—To ℥viij of muriate of ammonia, and an equal quantity of newly burnt lime, add four pints of boiling water; allow the mixture to cool in a well-closed vessel, and from the strained and clear solution distil off eight ounces of the liquor ammoniæ.

Liquor Ammoniæ Acetatis.

℞ Ammoniæ Subcarbonatis, ℥j.
Acida Acetici Diluti, Oj. vel q. s. ad Ammoniam accurate saturandam.
Misce secundum artem.

Thus prepared, the liquor of the acetate of ammoniæ forms a very superior article to what is commonly found in the shops.

EARTHS AND THEIR SALTS.

Calcis Murias.—That eminent Professor of Chemistry to the University of Oxford, the late Dr. Thomas Beddoes, of Clifton, was very dissatisfied with the preparation of the muriate of lime ordered by the London College; and therefore, for many years before his decease, he directed it to be prepared in his own practice according to the following simple and excellent method, which completely supersedes the complicated formula of the present Pharmacopœia:—

Liquor Calcis Muriatis.—(Dr. Beddoes's.)

℞ Acidi Muriatici.
Aquaæ Distillatæ, āā ℥iv.
Marmoris Albi Pulv. q. s. ad saturandum.

Many doubts have been expressed respecting the use of this medicine in scrofula, but I have witnessed the administration of it by Dr. B. in such

cases with evident advantage. That excellent surgeon, the late Mr. Baynton, of Bristol, also corroborates this statement in his work on Diseases of the Spine. I can also attest, from my own experience, that it deserves not to be disregarded. The solution should be kept closely confined in bottles with glass stoppers, aud given in doses of from 30 drops to one fluid dram, in *distilled water*.

Liquor Calcis.—In consequence of Mr. Dalton's discovery, and Mr. Phillips's confirmation of its correctness, I have no doubt the London College will direct the liquor calcis to be made with *cold*, instead of boiling water, in the next Pharmacopœia; reasons for which will be found in Dr. Paris's Pharmacologia, Vol II. p. 275, in a foot-note.

Magnesiæ Carbonas.—According to correct nomenclature, this preparation should be named magnesiæ subcarbonas; satisfactory reasons for which the reader will find in Mr. A. T. Thomson's Dispensatory, third edition, p. 631, in a foot-note.

Remark.—If distilled water be employed, the magnesia will be lighter, and of a whiter colour.

PREPARATIONS OF ANTIMONY.

Liquor Antimonii Tartarizati.—It will be perceived by the fifth edition of Dr. Paris's Pharmacologia, Vol. II. p. 274, that the College has at length determined to substitute a weak spirit for the wine at present used in this preparation, which, if done, ought to be rendered palatable as a medicine for children, by the addition of raisins or some syrup; otherwise druggists will not be able to vend it as a substitute for the old antimonial wine, which is often done. If this remark is not attended to by the College, the former objectionable preparation will still be sold, the necessity for which may be removed by a little attention. I would therefore beg leave to suggest the following method of making the antimonial solution, instead of the present injudicious formula:—

℞ Antimonii Tartarizati, gr. xxxij.
Aquæ Distillatæ, ℥xiv.
Spiritus Rectificat. ℥ij.
Uvarum passarum, demptis acinis, unc. ij.
Macera per hebdomadam, et cola.

If it be considered preferable, the raisins may be first digested in the weak spirit for a week; the tincture thus procured may be strained off, and filtered through paper, in which should be dissolved the tartarized antimony, and the whole made up to sixteen ounces by measure, by the addition of water or a little more spirit. A similar preparation may be made by dissolving the antimony in twelve ounces of water, and by adding to the solution rectified spirits of wine, and syrup of lemons, of each two fluid ounces: this, I believe, will be found to be an elegant and durable preparation. Both these contain precisely the same proportion of tartarised antimony as the present liquor antimonii tartarizati, viz. one grain in four fluid drams.

(To be continued.)

TREATISE *on* PRACTICAL CUPPING. By SAMUEL BAYFIELD, *with Plates, &c.* 12*mo. p.* 175. (*Cox & Son.*)

Independent of the manual operation of cupping, and the manner of detracting blood, Mr. Bayfield has given an historical account of the operation itself, as well as a copious and minute description of the several methods of performing it. He has fully described the instruments and the way of using them in a concise and explanatory manner. Mr. B. recommends the approved scarificator, and offers some judicious remarks respecting the cucurbitulæ, for which we refer to the volume, whence we transcribe the following practical observations. In addition to these and the torch, or exhausting lamp, the operator should have in readiness "a washing-hand basin; a piece of fine sponge; a small bottle of rectified spi-

rit of wine; a lighted taper; a jug of warm water; some folds of lint; a piece of adhesive plaster, or black court plaster, a box of cerate either of wax or spermaceti; two or three napkins; a gradicated measure. Instead of the last article one of the glasses may be used.

The operation itself is next described, and suitable directions laid down, varying according to the directions in which cupping may be regarded.

" 2. For general purposes, let the scarificator be set so that the points of the lancets project from the face of the box to the distance of one quarter of an inch. There are particular exceptions to this rule:—*when the operation is to be performed behind the ears, the depth of the lancets should be one-seventh of an inch; for the temple, one-eighth; and for the scalp, one sixth of an inch.*

" The next step is to select a spot (on the part chosen for the operation) where each glass is to be affixed. It should be free from the projection of any process of bone, and yet not be overloaded with fat.

" 4. The part therefore should be carefully examined with the finger; and an eligible spot being found, the glass should be placed upon it, for the purpose of adjusting its exact situation, and to serve as a guide to the eye in its subsequent application.

" The number of glasses which should be used must be determined according as the part may be adapted to receive them, and to the quantity of blood necessary to be drawn. About one glass to every four ounces required, is the usual ratio; so that, if it be wished to take away 18 or 20 ounces and the part will allow of their application, four or five glasses may be put on; as the abdomen, the back, &c.: but there are few parts where more than four can be applied conveniently, and often not more than two or three; as on the upper part of the neck, for instance; and sometimes but one, as on the temple, &c. Three cups usually extract from five to seven ounces of blood at each application.

" 5. Some hot water is now to be put into a basin, and the cups are to be immersed in it till they become warm. The part itself should be fomented with hot water; and the operator having poured two or three drams of the spirit into a cup or glass, takes the torch in his right hand, and a cupping-glass in the left, and places the lower edge of the glass in contact with the skin, (in the exact spot where it is to be affixed) elevating the edge at the opposite side of the glass about an inch and a half from the skin; the wick of the torch is now to be dipped into the spirit, lighted at the taper, and carried under the glass to its centre, where it is suffered to remain about two seconds; it is then to be withdrawn quickly, and if it has been properly performed, the operator will feel the glass sink from his fingers, and fix itself to the part; the skin rising slowly into the glass, until it occupies nearly one-third of the space within it.

" 6. The glass having remained affixed about a minute (during which time the top of the scarificator-box should be warmed on the palm of the hand), the operator holding the scarificator in his right hand, takes hold of the glass with his left, and insinuating one of the finger nails of the right hand beneath the glass, the air rushes into it. He instantly removes the glass, and before the tumefaction has subsided, springs the lancets through the integuments. The glass is then immediately exhausted, and applied as before, when the blood will be observed to flow copiously.

(To be concluded in our next,)

TO THE EDITOR OF THE MEDICO-CHIRURGICAL AND PHILOSOPHICAL MAGAZINE.

Sir, — Should the enclosed be considered worthy of insertion in your widely-circulated Magazine, they are at your service, &c.

Two Cases of Disease in new-born Infants.

By CHARLES CLAY, Esq. *Member of the*

Royal College of Surgeons, Edinburgh.—Ashton-under-Line, Lancashire.

Betty D—ke, of Hurst Brook, near Ashton-under-Line, sent for me on the 14th of August, 1823. She was then in labour of her first child.—Upon examination, per vaginam, I found the breech of the child presenting, but I was very much surprised to find something coming along with the breech; this also had every character of a breech case, excepting the parts of generation, (which could not be found in either of the presentations above-mentioned.) As the labour-pains were very strong and the parts advanced freely, I did not interfere; yet I must confess I was no wiser with regard to what accompanied the breech, until the parts began to protrude externally, and then I found that the child had two large tumours between its thighs. The labour concluded two hours after my arrival; it was of short duration, but the pains were very strong. The following is the statement with regard to the child:

The child was a female, the labiæ of which were swelled to an enormous extent; so much, that they had the appearance of two large pears, and were full as much in diameter as the breech itself: the clitoris, and all parts between the labiæ, were swelled in the same proportion. The parts were of a dark red colour, (except what were between the labiæ, which were a complete black.) No other part of the child was in the least discoloured or swelled, not even those parts closely connected with the labiæ. I had but a very poor opinion of the child's life, and merely ordered linen-cloths, wet with the following, constantly applied.

℞ Acet. distillat, ʒiij.
Aq. Calid. ʒiv.

Yet I was agreeably surprised to find that in less than three weeks the swelling abated—the parts became of their usual size, and nothing remained but the complexion, which is still a little inclined to the liver colour. Nothing remains now but to ask what was the cause of this affection of the labiæ. Was it in existence before labour commenced? Or was it owing to the efforts of labour? To these questions I answer, that it could not be owing to the efforts of labour. 1st, Because the labour was of short duration. 2d, There was no evident obstruction, for the parts *freely advanced*. 3d, Because the line of injury in the child was so distinct, that if it had been owing to the efforts of labour, the breech, the back, or the thighs would have partaken in some degree of the injury. 4th, It could not be caused from the interference of the accoucheur, because there was none except in bringing down the extremities—and 5th, Because the singularity was detected before the parts suffered much pressure in the pelvis; and on my first arrival, it appeared most probable that it was in existence previous to labour. The great extent of the swelling, and the deep colour attending it seemed to favour the opinion. The cause at least seems very uncertain. The mother had a fall previous to labour, and the abdomen was violently struck by the corner of a table. This is the only circumstance that I can trace at all likely to be ascribed as a cause. Accoucheurs know in what manner old women will speculate on such occasions. In this case an old dame had the cruelty to assert that it was a divine judgment fallen upon the patient for a deed of darkness (being a love child). I now leave the rest to the consideration of your readers.

The second case was Mrs. Pembleton, Hurst Brook—who was delivered of her fourth child, Sept. 15, 1823. This was also a breech case. After the child was born, I observed that it had a very thick neck, and when I examined it more closely I found it to be a real case of bronchocele. The father of the child and all his relations were free from such affections, but the mother had a

similar affection of the neck, as well as the mother's aunt. This case serves to show that a child in utero may be and is sometimes affected with bronchocele. The child's neck measured eleven inches and a half round. The tumour is perfectly moveable, and the child seems to bear it with the greatest ease, with the exception of a little noise and oppression in breathing.

THE LATE DR. BAILLIE'S FAREWELL SPEECH TO HIS PUPILS.

On withdrawing from the situation he had so long and so honourably filled, as a public teacher of anatomy, in Great Windmill Street, Dr. Baillie gave his last lecture (upon the absorbent vessels) on Thursday, the 11th of April, 1799. After the lecture, he addressed his pupils in the following words:—

"Having finished my part of the present course of lectures, I now retire, after fifteen years service, from my situation as a public teacher of anatomy. My professional engagements, for more than twelve months past, have rendered it extremely inconvenient for me to continue to give lectures. But, I must confess there are other reasons, more powerful than this, which have determined me to make so painful a sacrifice: these, however, are such as it would be improper to explain in this situation.

"During the time I have had the honor to be engaged as a teacher, I have endeavoured faithfully to discharge my duty to my pupils; and my defects have not been owing to a want of assiduity or desire to serve them. I shall still be interested in their prosperity, and will omit no opportunity of promoting the study of anatomy.

"Anatomical lectures will continue to be given here by Mr. Cruikshank, whose labours in the cultivation of this branch of science have long been well known;—and by Mr. Wilson, whose abilities promise that he will fill this situation, with great credit to himself, and advantage to the public.

"I thank you sincerely, Gentlemen, for the respectful uniform attention with which you have honoured me. You have ever appeared much more desirous to overlook my defects, than to search them out.—I leave you with regret; but not without hope that I shall still live in your recollection and esteem."

Dr. Baillie was much affected in delivering this address, which was heard with the most profound attention. He then withdrew, amidst the loud and reiterated applause of a numerous company, consisting of nearly an hundred and sixty pupils. Dr. Clarke, Sir William Blizard, Mr. Llynn, Sir Astley Cooper, and several other gentlemen of eminence in the profession, were also present.

His pupils raised a subscription amounting to upwards of 100 guineas, to be laid out in the purchase of a piece of plate, which was presented to him as a token of their respect for his private character, his professional talents, and his unrivalled abilities as a teacher.

MELANGE.

Hissing Noise in the Left Cavity of the Chest.—MM. Rossi and Fenoglio, of Turin, related the case of a person in whom a hissing noise proceeded from the left side of the chest, and was so loud as to be heard at some feet distant. The man assured them that, when in church, the noise was so great as to attract the notice of those who were near him. He attributed this disease to a fit of passion, which he said had been immediately followed by the hissing. M. Rossi made him strip, and take full inspirations, at the same time examining the principal points by the method of percussion, but without being able to detect any pulmonary lesion, aneurism, or polypus. The diastole of the heart, as well as the beating of the pulse, corresponded to the hissing; they were very strong, whilst the systole was weak. The power which produced the diastole was so constantly active, that the systole was little felt at the radial arteries. M. Rossi thinks that the hissing proceeded from the heart, and gives the follow-

ing explanation:—1st. Either the blood passing from the left ventricle into the aorta, not only during the diastole, but likewise during the systole, was propelled with great impetuosity; or, 2d, the fluid encountered in its passage into the aorta some resistance, the effort to surmount which occasioned the hissing. Hence he concluded that the cause of this noise was in the orifice of the aorta. The patient died leucophlegmatic some time after: the body was opened and the valves at the orifice of the aorta were found to be schirrous. The commentator upon this case, in the Revue Medicale, doubts the accuracy of the explanation offered by Rossi, and conjectures that the hissing noise depended on some peculiar affection of the larynx. *Query*: Is it likely that two medical men, who saw and examined the patient, would refer to the region of the heart a sound proceeding from the larynx, as insinuated by their French commentator.—*Revue Medicale*, Sept. 1823.

New Question in Legal Medicine.—We occasionally see children born with one or more supernumerary toes or fingers, with teeth already developed, and other peculiarities of organization, but these seldom pervade whole generations. In one of the German Journals of the present year, we find an account of two families, named Wolter and Gashow, in which all the individuals are born with a sixth finger and toe! These supplementary fingers are only the sixth part of the size of the ring-finger, and have only one or two phalanges. A child was born in one of these families without the supernumerary finger, and this gave rise to a curious question in legal medicine. The father, who lived on bad terms with his wife, took occasion to commence a process against her, suing for a divorce, on the plea of adultery being proved by the absence of the family-mark. This being the only proof against his wife, he was nonsuited.

TO THE EDITORS OF THE MEDICO-CHIRURGICAL MAGAZINE.

"*Honor to whom honor is due.*"

SIR,—I observe in your 39th Number, under the head of "Hospital Reports," the following notice. "The operation for "tying the subclavian artery, performed "by Mr. Key, assistant surgeon to Guy's "Hospital as reported in our thirty-third "Number has completely succeeded. Mr. "Key then, has the honor of being the "*first successful* operator in a similar case."

Now I beg to state, that Mr. Key is *not the first* who has performed this important operation with success; for though cases are not necessary, yet it has several times succeeded in this and other countries.

In proof of my assertion, I need only refer you to one of your own recent Numbers (No. 36) for an account of one of the cases I allude to. The operation was performed in the Royal Infirmary of Edinburgh, by Mr. Wishart, one of the surgeons, on the 28th of August, whereas Mr. Key operated on the 18th of Sept. and I know by private accounts from Edinburgh, that Mr. Wishart's case has also completely succeeded, and the man left the Infirmary some time since. Another recent case is reported in No. 117 of the "London Medical Repository," by Mr. Bullen of the Lynn Dispensary, who performed the operation on the 31st March of the present year, and though several adverse circumstances occurred, both during and after the operation, the patient was well in three months.

But *the first* case in which *complete success* attended the operation of tying the subclavian artery where it first comes from behind the anterior scalenus muscle, was that under Dr. Post of New York, and was performed on the 8th of September, 1817. The patient was well in a month. For an account of this interesting case, I refer your readers to the Medico-Chirurgical Transactions, vol. 9, p. 185.

The subclavian artery was tied below the clavicle by Mr. Keate, as far back as 1801, and in 1815 by Mr. Chamberlain of Jamaica, and both cases succeeded. Perhaps other cases may have occurred which I am ignorant of.—I am, Sir, your's, very respectfully, G. W.

Nov. 10, 1823.

The above letter is inserted as received, although we were aware of the error which led to the remarks it contains, in consequence of the qualifying word (among) having been overlooked, as well as the whole of the concluding sentence having been omitted; which together should have run thus:—"Mr. Key then has the honor of being among the first successful operators in a similar case,

and the ouly one with whom the operation has succeeded at this Hospital."—(Guy's.)

A reference to our columns at various periods will shew that we could not intentionally have suffered the oversight to have escaped our notice.

GAS LIGHTS IN INDIA, &c.

In a Calcutta paper of March last, we observe, that on Tuesday the 18th of this month, the premises of Mr. Bathgate, a Chemist and Druggist of Calcutta, were "brilliantly and beautifully illuminated with gas light, almost the first display we believe, of this ingenious and valuable invention in India." Upon this occasion, the Editor of the paper referred to, congratulates his countrymen on the many useful inventions discovered and propagated by them; and recommends the application of this light to the illumination of the temples of the worshippers of Sirva and Durga, whose most distinguished emblem is flame, and whose followers compose the mass of the people in Bengal. He also advises the Parsees of the Western Coast of India to adopt this beautiful light, and extinguish the sacred fire. Coal and oil being abundant at Calcutta, and several apparatus having arrived from England for the manufacture of gas, it is expected that these lights will becomse general in that city. Crowds of the better description of natives flocked to witness this first exhibition, expressing great admiration at the beauty of the contrivance.

Another Calcutta paper of the 6th of May last, states, that two of the native inhabitants of that city were killed by lightning during a violent thunder storm, which occurred two days previous to this date, the one a man, after being struck by the electric fluid, survived for three-quarters of an hour, but in a speechless state; the other, a woman, whose death was instantaneous. On a view of the bodies two days afterwards, the clothes on the woman presented the appearance of having been singed; she was much swollen about the thorax and abdomen, and these parts were rapidly approaching putrescence; the eyes and tongue showed the like tendency; and the whole body was more advanced towards putridity, than in ordinary cases. The concussion had caused a discharge of blood from the ear, and the skin was so much singed, as in some parts to lay the flesh bare. The body was stiff in a high degree, and on attempting to bend the limbs, they resisted a much greater force than necessary for that purpose under ordinary circumstances. The corpse of the man presented but little external appearance of injury, but was equally advanced in putridity with the other, and quite as inflexible.

Three circumstances are remarkable upon the present occasion, worthy the notice of medical men and of philosophers.

1.—Instead of the limbs and body being flexible and supple, as said to be invariably the case after death by lightning, the reverse was the condition of these bodies.

2.—Instead of bodies keeping for days without any tendency to putrefaction, these were rapidly approaching to it; in fact it was far advanced.

3.—From the account of several persons, it appears, that other individuals who were lying in the same place, and nearly in a line, and in contact with the man who was killed, were not hurt; but that the lightning attacked them alternately; or, as has been proved when a portion of the fluid strikes a man,—a second portion of the same will not strike another who stands immediately close to him, because there is always a repulsion between bodies electrified in the same way.

HOSPITAL REPORTS.

ST. THOMAS'S HOSPITAL.—ISAAC'S WARD.

Taliacotian Nose.

Nov. 14.—This operation we briefly noticed, in our last number, under the head of Hospital Reports, without, however, giving any particular detail of the manner in which it was performed, or of the patient himself, who, it appears, entered the hospital in April last, under secondary symptoms of syphilis, which had already manifested themselves to a great extent in the bones of the nose, and which has since ended by the loss of the whole of the external nasal apparatus.

The patient, according to his own account, previous to his entering the hospital, had been under a number of hands, all of whom, in their turn, had saturated him with mercury. He admits, however, that his manner of living was irregular, and that he seldom took his medicine as prescribed. He is a short set man, rather stout, about thirty years of age, dark complexion; but, as far as regards his face, without a nose, it would be equally absurd as impossible to bring it within the boundaries of ordinary description. His appearance upon the whole, with his forehead shaved nearly as high up as the coronal suture, leaving a large black bushy tuft, on the summit, almost erect, with the shape of his nose etched out on his forehead; a face rather broad than lengthy; divested of his upper garment, appearing in his waist-

coat and shirt sleeves, conveyed to our mind the picture of a Creek Indian, with his face tatooed in the costume of his country. He was brought into the theatre some minutes before the operator (Mr. Travers) made his appearance, looking fiercely-cool and determined.

The operation, which was frequently interrupted, by the blood accumulating in the fauces, was performed nearly in the following manner. The patient was laid on his back, the head unsupported—the edges of the quondam nose were removed—the portion of integument selected to form the new nose, previously marked out in a cordiform shape, having a rotunded conical elevation at the base, was quickly detached from the part, with the exception of a small snip between the eye-brows, (intended to keep up the circulation) and brought down upon the site of the old nose, where it was confined by means of five sutures—one at the intended septum narium, and two on each side of the bridge. The part whence the integuments* were removed was drawn together as closely as possible, by means of adhesive strapping, having a simple dressing interposed—longitudinal slips of adhesive plaster were laid over the sides, and transverse ones at the root and base of the nose; on each side of which, bolsters of lint were placed, and adhesive plaster transversely again over these. Underneath, by way of supporters, pieces of adhesive plaster, modelled in the shape of cones, were thrust up each side of the intended septum. The patient appeared rather exhausted towards the end of the operation, throughout which he displayed a deal of firmness; and actually suffered considerable pain; which, however, was not manifested by any violent exclamations.

Up to yesterday little hopes were entertained of the operation being attended with any success—mortification had apparently commenced at the apex which threatened a continuance along the back of the new nose. The febrile symptoms, within the last three or four days, are considerably moderated—adhesion has commenced at the root extending downwards, and, notwithstanding previous appearances, which are now evidently ameliorated and ameliorating, the opinion entertained is, that the union will become general, and the operation consequently successful.—The sutures have not yet come away; the patient's general health is improved and his spirits good. The granulations on the forehead are maturing favourably—in short, we hope still to have it in our power to communicate to our readers that the case, notwithstanding the doubts that have hitherto been hanging over it, has turned out agreeably to the expectation of the operators.

The case of stone, operated on by Mr. Travers, as recorded in our last number, previous to the preceding operation, is doing extremely well, notwithstanding the occurrence of hæmorrhage, by which the little patient has been much benefited.

* Vide our last Number.

OBITUARY.

On Friday the 7th ultimo, at Chigwell in Essex, after a long illness, Eliza, wife of George Robert Rowe, Esq. Surgeon of the above place, aged 26.

On Thursday se'nnight, in the 38th year of her age, Rebecca, wife of Mr. Lockyer, Chemist, Bedford-street, Bedford-square.

ERRATA *for the preceding Number.*

PAGE 243, left hand column, under Surgical Lectures—for *October* READ November.

PAGE 243, right hand column, 24th line from the top—for *ammoniæ* READ ammoniaci.

PAGE 256, left hand column, under Hospital Reports, for *tallicotion* READ taliacotian.

Fourth line under *Tallicotion* operation, for *ride* READ ridge.

SCALE of ADVERTISEMENTS,

For the Weekly Numbers of this Magazine.

Twelve Lines or under....	£0	7	6
Every additional four	0	1	0
A Column.....	1	1	0

*** *When more Advertisements are received than the last page will contain, an additional leaf will be appended.*

TO CORRESPONDENTS.

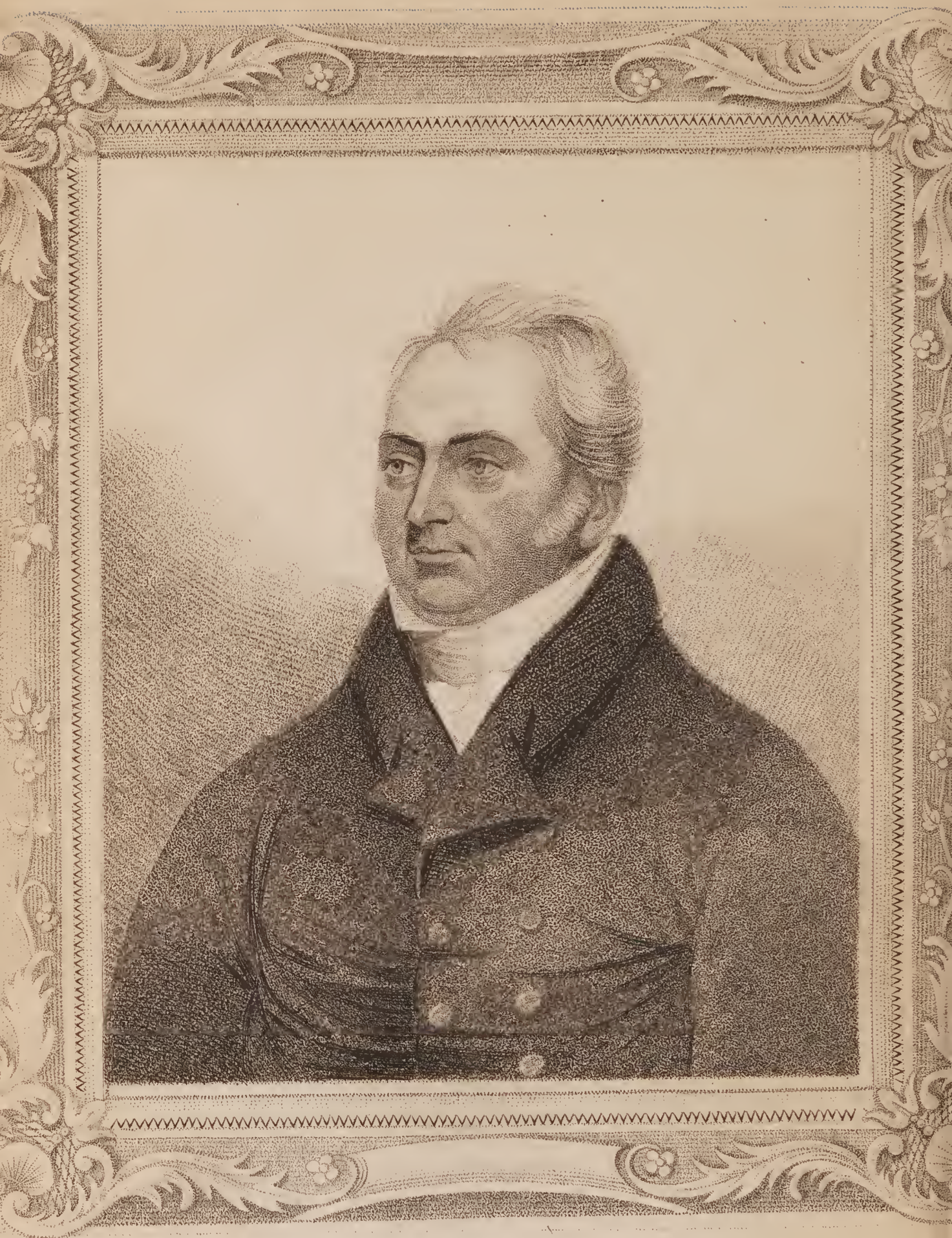
We have been favoured with several communications within the last week which will be acknowledged in our next number.

All Communications, Advertisements, &c. (post paid) addressed for the Editors, at the Publisher's, &c.

London:

Printed by E. JUSTINS, 41, *Brick Lane, Spitalfields.*

Published by COX and SON, St. Thomas's Street, and 39, High Street, Southwark. Sold also by Sherwood, Neely, and Jones, Paternoster Row; Simpkin and Marshall, Stationers' Court; John Cox, Berner's Street, Oxford Street; Callow and Wilson, Gerrard Street, Soho; W. Stewart, South Bridge Street, Edinburgh; J. Cameron, opposite the College, Glasgow; Hodges and M'Arthur, Dublin; &c. &c.



Sir Astley Cooper Bart.

PUBLISHED BY D. COX, 76, HIGH STREET, SOUTHWARK.

THE WEEKLY

Medico-Chirurgical Review & Philosophical MAGAZINE.

No. XLIX.] SATURDAY, JANUARY 9, 1824. [*Price* 4*d*.

" FLORIFERIS, UT APES, IN SALTIBUS OMNIA LIBANT
OMNIA NOS, ITIDEM, DEPASCIMUR AUREA DICTA."

[*Commencing our Third Volume with the New Year, we are compelled, by gratitude as well as inclination, to return our sincere thanks, with the compliments of the season, to our numerous friends and readers, for the very flattering encouragement and general reception which our labours have hitherto experienced from the commencement of the* MEDICO-CHIRURGICAL (REVIEW) AND PHILOSOPHICAL MAGAZINE; *but more particularly within the last six months, which have considerably added to our circulation, by increased demands from various parts of the United Kingdom, &c. &c.*

We have more than once already stated our pretensions, which, though limited, are not restrained; we deem it needless, therefore, to repeat them. We have only to add that, in addition to the usual selections of foreign and domestic Medical Intelligence, a WEEKLY SUMMARY *of passing events, connected with every branch of the profession, will be found in our columns—embracing, among various other features,* NOTICES OF NEW PUBLICATIONS--TRANSACTIONS OF LEARNED SOCIETIES — HOSPITAL REPORTS—OPERATIONS—DISSECTIONS—MILITARY AND NAVAL MEDICAL OCCURRENCES, *at home and abroad*—DEATHS—BIRTHS—MARRIAGES, *&c. &c. &c.*]

MEMOIRS OF SIR ASTLEY P. COOPER, BART.

SURGEON TO THE KING, AND TO GUY'S HOSPITAL, &c. &c.

" No species of writing," observes the author of the Rambler (No. 60), " seems more worthy of cultivation than BIOGRAPHY; since none can be more useful, none can more certainly enchain the heart by irresistible interest, or more widely diffuse instruction to every diversity of condition." To complete, therefore, the full estimate of these axiomatic observations, whether it be in describing the living or the dead, Biography demands the sternest disinterestedness and the nicest discrimination, from which ought to result the most just and impartial conclusions.

It has been well observed, that, in proportion as a country advances in literature and the fine arts, Biography becomes a more interesting inquiry. The philosophers and poets of earlier times had but few contemporaries adequate to the task of furnishing memoirs of importance enough to attract public attention; and from the exalted opinion entertained of the character brought biographically before the public, a faithful record of their lives tended to abstract from rather than to add to their celebrity. In laying, therefore, the following sketch of one of the first and most distinguished surgeons of the age, before our readers, we are aware that much is wanting on our part, under more than one consideration, to do sufficient justice to the genius and talents and exalted moral virtues of so worthy and so estimable a character, as the subject we have selected, whether he may be regarded as the surgeon or as the

private gentleman. For these reasons, we shall proceed with proper caution; and endeavour, as we advance, to render the task as little arduous and irksome to ourselves as free from hazard and detriment to the character we would wish, as far as the means extend, to illustrate.

Sir Astley Cooper, Bart. was born at North Yarmouth, in the year 1768, of which place his father, (who died at an advanced age, and at a time the highest dignity of the church was about to be conferred on him) was vicar. He is the youngest of three sons, the eldest, Robert Bransby Cooper, Esq., one of the present representatives in parliament for the county of Gloucester; and the other, Lovick Cooper,* deceased, who was brought up to the church, and resided at North Yarmouth, where he enjoyed a living under his reverend father.

Sir Astley commenced his professional studies, for which he had been duly prepared, under Mr. Cline, sen. at that time surgeon to St. Thomas's Hospital, and lecturer on anatomy.

In the year 1791 he was married to Miss Ann Cock, daughter of an eminent merchant in the city, and niece to Mr. Cline, to whom he had now regularly served his apprenticeship, and had become a member of the Royal College of Surgeons.

In the following year, Sir Astley commenced Lectures on Surgery, at St. Thomas's Hospital,† and was, shortly afterwards, appointed demonstrator to Mr. Cline, with whom he soon after became Joint Lecturer on Anatomy.

On the resignation of his uncle, William Cooper, Esq. one of the surgeons of Guy's Hospital, in conjunction with the present Mr. Forster and the late Mr. Lucas, Sir Astley was appointed surgeon, in his stead, to this institution.

(*To be continued.*)

* It is to a daughter of this gentleman that Mr. Key, the present house-surgeon to Guy's Hospital, is married.

† Previous to this period, surgical lectures were not delivered at either of the Hospitals of Guy's and St. Thomas's.

Case of Dropsy of the Ovary, in which that Viscus had distended to an unusual Size. Communicated by Mr. William Cox, Surgeon, St. Thomas'-Street, Borough.

Mary Bradley, aged 66, a single woman, of spare make, and whose habits, in the early part of life, had been irregular, dated the origin of her complaint 35 years since, but could give no other suspicion of its cause, than that she had, some time previous, received a blow on the left side of the abdomen, while in a frolic with some friends. Through the whole progress of the disease, neither her constitution nor her cheerful disposition appear to have been affected.

In 1815, the first time I saw her, the greatest circumference of the body was $2\frac{1}{4}$ yards—the legs were œdematous and superficially ulcerated. The left arm was also much impaired. With these inconveniences she could still crawl up and down stairs night and morning, and, till within three years of her death, supported herself by attending to a small school.

Some idea may, however, be formed of the magnitude of the tumour, from her inability to see her feet, which she said she had not done for many years. The activity of this woman, even after the complaint had made considerable advancement, was so great, that she had leaped a five-barred gate, and had been, to use her own expression, "always very *lissome*." A short time before her last illness, the circumference of the body was again taken, and it then exceeded three yards. It was at this pe-

riod impossible to say, from appearance alone, on which side the disease had originated. The bowels were frequently constipated, and the secretion of urine was also diminished. These symptoms were relieved by a mixture of gin and jalap, remedies to which she often applied. Her activity remained undiminished to the last, for she would not be confined to bed till within three weeks of her death, which happened late in September, 1821.

On the following day I endeavoured to obtain permission to inspect the body, but was allowed only to evacuate the fluid, which was accomplished in the following manner. Having made an incision of a few inches in length in the linea alba, the surface of the ovary became exposed. A child's pop-gun, which happened to be in the room, was then introduced into it, and the fluid drawn off, of which 64 *quarts* were measured. From two to three quarts more were allowed for that which escaped into the abdomen and about the bed and the room. This allowance was certainly moderate, so that the whole fluid amounted to 16½ gallons. My attention was now directed to the cyst, which I was anxious to procure, and in which I succeeded, by drawing it gradually through the aperture of the abdomen, which was not larger than would admit the fore-arm. It adhered, excepting at its natural attachment, by but one small band of adhesive matter. Under such unfavourable circumstances it was impossible that I could ascertain the relative position of the other viscera, not one of which could I see, excepting the uterus, which had become prolapsed. The most remarkable appearance, after the removal of the ovary, was the great expansion of the lower part of the chest, caused by the pressure of the tumour between the cartilages of the ribs.

The external surface of the cyst was smooth and polished; its internal irregular, and partially enpymosed, also having the appearance of cicatrization, and covered likewise by adhesive matter of various consistence. The fluid was of a chocolate colour, and contained in one cavity.

The preparation is now in the possession of Dr. Blundell, Lecturer on Midwifery and Philosophy, at Guy's Hospital.

Ovarian dropsy is a complaint of which I have seen three varieties. The first, most common, and to which the name most strictly applies, is where the whole fluid is contained in one cyst. This form is local, unattended with constitutional derangement, and therefore not dangerous.

The second variety is the encysted; that is, the ovary is distinctly divided into several cavities, in which serum is secreted. This likewise is local, and occasions immediate danger. The third, or *gelatinous* form, I have seen two instances of.* These may not, however, by some be admitted as cases of ovarian *dropsy;* but as the symptoms have so nearly coincided with those of the other varieties, as almost to warrant the operation of paracentesis, I think the term dropsy more applicable than any other. In this case the disease is constitutional, rapid, and dangerous.

It is not my intention to prolong these remarks farther, than by shortly stating two or three points for the

* The contents of the ovary are of a yellow, loose, gelatinous character, and intersected by numerous bands, which pass in various directions to the parietes of the cyst. Here fluctuation usually appears more than probable, and has even induced the practitioner to attempt the diminution of the ovary by paracentesis.

consideration of the reader, as to the propriety of urging patients to submit to paracentesis, excepting under distressing symptoms. In *common ovarian dropsy* temporary relief is certainly given; but the disease speedily returns, and the operation has been followed by serious irritation, and even by death.

In the *encysted*, no other advantage (if it be one at all) is gained by tapping, than the knowledge of the form of dropsy. It neither satisfies the practitioner nor relieves the patient, and is exposed to the same unfavourable consequences as the common form.

In the *gelatinous* variety, it is obvious that the tumour must have remained undiminished, and that the danger would be increased in a constitution already impaired by the disease, if the operation were had recourse to.

With these remarks, I leave the consideration of the operation of paracentesis in ovarian dropsy, excepting under alarming and distressing circumstances.

MEDICO-CHIRURGICAL TRANSACTIONS. Vol. XII. Part II.

(Continued from Page 340, Vol. II.)

On the Effects of Stricture in the Urethra, particularly in a sacculated State of the Bladder. By JOHN SHAW, Esq.

Mr. Shaw begins this valuable paper by stating some interesting pathological facts.—

"1st, I have not, in more than a hundred dissections which I have made of diseases of the urethra, seen a stricture or narrowing of the canal, posterior to the ligament of the bulb; nor have I been able to find one example of stricture beyond this part among those preserved in the College Museum."

"2d, In almost every instance where a narrow stricture has existed for some time, in any part of the urethra anterior to the ligament of the bulb, I have found the membranous and prostatic portions dilated to three or four times their natural size."

"3d, The ducts of the prostate, which are naturally very small, are always more or less enlarged when there has been a stricture, or a long continued irritation of the canal."

"4th, When such stricture as causes occasional retention of urine has existed for some years, the bladder is found to be not only thickened, but often at the same time sacculated."

From the first of these it follows, that if our instrument is obstructed at a point posterior to the ligament of the bulb, we ought not to infer a stricture; and hence both from this and the second, we should not, on meeting with such an obstruction, attempt to push the instrument further in. The third might lead to the inference, that the instrument, if obstructed, had passed into one of the dilated ducts of the prostate, which often form a complete labyrinth. The using force in such cases, though recommended even by Dessault, must always be hazardous and improper.

As the healthy urethra becomes suddenly narrow at the bulb, while the curve of the canal suddenly changes, the ligament being higher than the sinus of the bulb, it must follow, in cases of slight inflammation, that spasmodic action will be excited by passing a bougie, the instrument will be obstructed, and lead to the false supposition of a stricture. Besides, when the bougie is obstructed at the bulb, its upper surface may be so cut, or indented, by being pressed against the lower edge of the ligament, as to have exactly the same appearance as that which has been considered as an unequivocal proof of there being a stricture at that point where the instrument has been stopped. Many strictures at the bulb may probably, indeed, have originated in the inflammation consequent upon ineffectual attempts to pass the instrument, while the internal membrane was irritated or inflamed.

Mr. Shaw goes on to infer, that stricture is very frequently followed by sacculated state of the bladder or prostate, often leading to the disastrous consequences of recto-vesical fistula, bursting of the urethra, and sloughing of the scrotum and penis, peritonitis, irritative fever, and death.

In treating such cases, Mr. Shaw, very justly we think, condemns the instrument invented for dilating strictures, as quite useless in cases of difficulty, for many strictures will not permit any thing thicker than a hog's bristle. In the cases in which the dilator might be used, the common means would be no less successful, and more simple. He advises the operation of cutting through the stricture, introducing a catheter from the glans, and endeavouring to make the urethra entire, by allowing the wound to granulate over the catheter. The operation is easy, the delay of it may prove fatal to the patient — a circumstance of daily occurrence in London; and when the stricture is divided, the principal object is attained. The great difficulty of the operation is the existence of false passages, which may be cut down upon instead of the stricture; and in passing the catheter afterwards into the bladder, we may again be misled by other false passages. The worst almost that can happen, is a fistulous sore; but this is known to be much more manageable than spontaneous fistula.

The paper was illustrated by numerous interesting preparations of strictures, false passages, dilated ducts, sacculated bladder, &c. from the Museum in Great Windmill-street.

Mr. Swan, of Lincoln, in a paper giving several cases of injuries of the pelvis, remarks, that

"When the urethra or bladder is wounded, and the bones of the pelvis at the same time are broken, it appears to me that there can be no chance for the recovery of the patient, unless an incision is immediately made to give it a free discharge to the urine; for if any of it is detained, it must destroy the bones, and prevent their union; or, at least, it must give rise to extensive exfoliations. At the same time, any loose portions of bone should be removed, as it is most probable the urine will have prevented their re-union."

Dr. Harry Leake Gibbs, of St. Petersburgh, in the succeeding paper, relates a case of axillary aneurism, in which the operation of tying the subclavian artery was successfully performed, on a strong plethoric cooper, aged thirty-five. The ligature came away on the twelfth day, and the patient was nearly well, and walking about, on the twenty-first day from the operation, the wound being all healed to a small spot in the centre, from which a little lymp was oozing. Pulsation not perceptible, but the arm warm and well nourished; appetite and sleep good.

"The arm and upper part of the shoulder must have been nourished, in the first place, by anastomosing vessels coming from the neck and right scapula; but especially from the extreme branches of the left epigastric, inosculating with those of the left mammaria externa, by which the blood at first returned to the axillary artery below the tumour, and so onwards."

(To be continued.)

On the Cause of Formation of Worms in the Human Intestines. From the German of Bremser, *by* H. S. Hymans, M. D. A. C. M. *of Rotterdam. Communicated by Dr.* W. Philip, *through Dr.* Johnson.

If it be proved that worms do not come from without into the human body, nor are innate with it, and consequently must owe their existence to some preternatural formation, the cause of this formation cannot probably be found in any thing else than in some anomalous quality, or mixture of certain substances, nou-

rishing, either generally or partially, some of the single organs of the body, or in a superfluity of those substances; to which cause, with the same justice as to any other, the said vermi-formation may very well be ascribed. The cause, however, of such an anomalous quality, or disproportion in the nutritive substances, can only be found in a relative debility of some organs, and not in a general one. For, as little as any debility may be called a disease, while the harmony of all animal functions is prevailing, just as little the said debility may be termed a cause of the formation of worms. It is only from a derangement of the functions of some separate organ, that a disease can be formed. The same, then, must take place, whenever any formation of worms shall be effected. If, for instance, in the stomach, the nourishing substances prepared from the food, are congruent with the nutritive secretions; if no more substances be animalized there than the absorbent vessels of the intestinal tube are able to take up, and actually have absorbed; or, on the contrary, if the fluids separated from the animal body itself, agree with the quantity of substances taken up by it, in order to be animalized and become homogeneous with its own mass;—in many of these cases, no vermi-formation will ever occur. But if the contrary takes place, nothing is sooner effected than the aforesaid formation. This, likewise, may account for our often meeting with persons who, if judged from their outward appearance, seem to be quite well, while, notwithstanding this, they are harbouring worms in their intestines. The stomach and bowels, or what are called first passages, in that case seem to be in a condition of higher vitality, than required for the preservation of the organism, and therefore the action of the absorbent vessels, (which merely take up the quantity required to supply the necessarily evacuated secretions, and nothing more,) is not congruent with the former condition; and in this case, the quantity of matter animalized by the digestive organs surpasses that which is absorbed by them; and thus, the remaining animal substance is appointed to form a living matter, or a worm. By this we see, that in a human body, the opportunity to form worms in the intestines, as well as that to other diseases, may either be hereditary, innate, or acquired. Nay, this gives a satisfactory explanation, why children more than adults —women, more than men, are disposed to the vermi-formation. In both, a certain debility of the absorbent vessels is constantly prevailing. It is a well-known fact, that during the first months of life, children, especially those that are not suckled often, do not prosper; or, at least, increase but very little in growth and strength, in spite of the abundance of good nourishing food bestowed on them. Now this is by no means to be always imputed to a want of nutrition in the food taken by them, but merely to the bad preparation of it in the stomach, and to the want of sufficient absorbance of the chyle prepared from it. In scrofulous or atrophic children, the free passage through the absorbent nourishing vessels is stopped, or, at least, considerably impeded; thus a great quantity of chyle remains stagnant in the intestines, in which I not only reckon the substances absorbed from the nutriments taken, but also the mixture of the substances absorbed from them; and, moreover, the mixture of these substances with the fluids of the body: in a word, a fluid already animalized, if not evacuated by stool, in the same manner as the usual secretions, easily pro-

ceeds to a formation of worms. Children of this description, as it is evident by appearance, are commonly affected with worms.

This explanation of the vermi-formation, according to my opinion, comes much nearer to reality than the doctrines of Ætius, Ægineta, Riolans, and Cabulinus; who suppose the tapeworm to be nothing else than the loosened inner skin of the tenuiora, gone over to an enlivened body. Similar theories are still to be met with in the present age. If, however, under the aforesaid conditions, worms are formed, this does not at all imply that wherever these conditions exist, worms must be found. This assertion, likewise, would be contrary to all experience; for it is frequently remarked, that all of the above-mentioned circumstances take place; nay, very often all the phenomena, by which we may think ourselves fully entitled to conclude the existence of worms, present themselves to our observation, where no worms may be existing. The cause of this occurrence is easily found, being undoubtedly no other than this; that the said condition only forms the one factor or the progenitor of worms, and indeed, the only one, that lies under the reach of our contemplation. This we may call the substantial factor; the other, which I beg leave for a while to call the spiritual one, is situated far beyond the region of our investigations. Its co-operation, however, is unavoidably required, whenever, out of the shapeless animalized matter, a new animal—a worm, shall be formed. To aspire to a more peculiar knowledge of this second factor,—although it be no other than the all-vivifying spirit, reigning throughout the universe, and, therefore, even already present in the shapeless animalized matter, though not with the required tension to create original individual life, will always, in our present state of existence, remain a foolish attempt. It is only by its effects that we are led to ascertain its presence.

Among the more remote causes of the vermi-formation, we may, in the first place, chiefly reckon a sedentary, inactive way of life, or any other which requires little or no exertion of muscular strength; secondly, wet, damp habitations; victuals out of which a tough, slimy, or rich chyle is prepared in the stomach; and especially the frequent use of fat, mealy, and milky food.—Feuillee considers the abundant use of sugar to be the cause of the more frequent formation of worms among the Indians. A sedentary way of life, most probably, is one of the remote causes why the formation of worms is more frequently found in women than in men. Another still greater disposition to this formation, proceeds from a constant abode in a damp habitation, which, by the suppression of free perspiration, is prejudicially operating on the functions of the absorbent vessels in the bowels. If, then, finally, the food is of such a quality as to forward the formation of worms, the means for this formation, at least on the side of the substantial factor, are completely afforded. It is a fact, that among sheep, the formation of liver-worms is caused chiefly by the pasturing of these animals on marshy grounds; and hence, in well-managed sheep-folds, shepherds are brought before a court of justice, whenever this or a like disease creeps into a flock; since, in such cases, either their having been pastured on wet grounds, or their having, during the winter, been fed upon muddy, not well cleansed fodder, almost to a certainty may be concluded upon. During wet seasons, however, the said complaint, without any fault of the

shepherd, causes great ravages among the sheep, and it is only by a prompt administration of better food and corroborative remedies, gentian, acorns, &c., that its further progress may be in some measure restrained.

(To be continued.)

R. PHILLIPS, F. R. S. &c. *on the Methods of employing the various Tests proposed for detecting the Presence of Arsenic.*

Mr. Phillips's object on the present occasion is not to offer any new test for arsenic, but to modify some of the methods of using the means already known, and to simplify their application; confining himself to treating of the mode of employing the following tests, viz. the reduction of the arsenious acid to its metallic state; the use of sulphuretted hydrogen; sulphate of copper and nitrate of silver, with the little apparatus required, in such a manner as to remove some ambiguity and difficulty.

Dr. Paris (Jurisprudence, vol. ii. p. 252), has justly observed, that, "the detection of the presence of arsenic amidst a complicated mass of alimentary matter has long been a problem of interest and difficulty," because "coloured fluids are capable of obscuring and changing, and even altogether preventing the arsenical indications." He (Dr. P.) then adverts to the proposal of M. Orfila to destroy or modify the colouring matter by means of chlorine; this method is justly stated to be liable to great difficulties in its application, and from sources too obvious to require notice. Dr. Paris, therefore, advises that a solution of ammoniuret of silver should be added to the fluid, to precipitate indiscriminately all bodies which it may be capable of so affecting; and then subjecting the precipitate to the action of black flux in a glass tube, for the purpose of subliming the arsenic in its metalic state.

"On considering this part of the subject, it appeared to me that animal charcoal (ivory-black) might be advantageously employed for destroying the colouring matter. I therefore mixed some of it with a coloured solution of arsenious acid, viz. the *liquor arsenicalis* of the London Pharmacopœia. I found that the colouring matter was so completely destroyed in a few minutes, that the test of nitrate of silver, or any other, might be readily applied. I repeated this experiment with port wine, gravy soup, and a strong infusion of onions,* and succeeded in these cases in procuring a solution sufficiently colourless for the application of the most delicate tests. It might be supposed that the phosphoric acid which the animal charcoal contains, might have some share in the production of the yellow precipitate with silver; I found, however, that water or wine, which was merely digested on the animal charcoal, produced no effect with the nitrate of silver, excepting a slight precipitate of chloride; and to prevent this, the ivory-black should be washed in a filter with boiling distilled water, till the fluid running through ceases to be affected by nitrate of silver. If, however, the ivory-black is of good quality, this precaution is unnecessary."

Of Sulphuretted Hydrogen.—Supposing the substance suspected to contain arsenious acid, to have been boiled in distilled water without any alkali, and deprived of its colouring matter as now described, the test to which it may at first be subjected is a solution of sulphuretted hydrogen gas in water This is to be preferred

---

* I particularly mention infusion of onions, because much stress has been laid upon the ambiguity which its yellow colour may occasion. It immediately becomes colourless. (See Paris and Fonblanque's Med. Jurisprudence, vol. iii. p. 199.)

to any coloured fluid containing sulphuretted hydrogen, such as the hydrosulphuret, or, perhaps more properly, hydroguretted sulphuret of ammonia; for this fluid possesses the colour when diluted, which we expect to produce by the action of sulphuretted hydrogen upon arsenious acid. The method of preparing this solution of the gas is perfectly simple. Put into an oil-flask about two ounces of muriatic acid undiluted with water, and an ounce and a half of powdered sulphuret of antimony; fit a cork to the flask, and pass through it the shorter leg of a small hollow glass tube, twice bent at right angles; pass the longer leg of the tube into a vial containing distilled water, and then by the heat of a spirit-lamp applied to the flask, sulphuretted hydrogen gas will be readily procured, and though much of it will escape, yet a sufficient quantity will be dissolved by the water. If distilled water cannot be procured, then rain water may be used, or if that be not at the moment obtainable, water, which has been boiled and become clear, must be substituted.

If a glass tube is not at hand, one may be readily formed of tin-plate soldered. I have employed one for the purpose of trying the experiment, which was made in about an hour; the shorter leg may be about two inches and a half to three inches long; the intermediate space and the longer leg, each six inches in length; the diameter may be about one-fourth of an inch; this passed through the cork, and used instead of the glass one, answers the purpose perfectly, notwithstanding the tin is slightly acted upon by the gas during its passage, and by the solution in which it is immersed.

To this solution, clear and colourless, add, in a wine-glass, or vial, some of the suspected fluid; if it contain arsenious acid, a yellow-coloured fluid will be produced, and, after the lapse of some hours, a yellow precipitate will fall down. It has been objected to this test, that antimony produces a similar appearance; while, however, there exists some resemblance in the colours, there are these differences in the effects; antimony furnishes a precipitate immediately, and with more of an orange tint.

Sulphate of Copper.—Arsenious acid produces no effect upon a solution of a sulphate of copper; but with the assistance of an alkali, a green precipitate of arsenite of copper is readily produced. It has been objected to this test, that a fallacious appearance is produced if the suspected solution be of a yellow colour; but for this case I have already provided. If the sulphate of copper be impure, owing to the presence of peroxide of iron, a greenish precipitate may also be obtained by simply adding potash to the solution. This test may be employed in two ways; first, add a few drops of an alkaline solution, as potash or its *sub*-carbonate to the suspected solution, and when mixed pour them into the sulphate of copper. If arsenious acid be present, a green precipitate will be formed; and there is a mode of removing any ambiguity which, if it does not escape my recollection, has not been previously noticed. To be certain that the sulphate of copper contains no peroxide of iron, add first to the solution some potash; if pure, a fine blue precipitate will be obtained; to this add the suspected solution; and if arsenious acid be present, then it will convert the blue precipitate to a green one.

Nitrate of Silver.—To confirm the results obtained by sulphuretted hydrogen and sulphate of copper, nitrate of silver is a test which may be

very usefully employed. The first method is simply to add the suspected solution to one of nitrate of silver, which should be prepared either from the crystallized or fused nitrate (lunar caustic), in order that all excess of acid may be avoided. After the suspected solution has been mixed with that of silver, drop in a solution of ammonia or potash, liquor ammoniæ, or liquor potassæ of the London Pharmacopœia; if arsenious acid be present, a bright yellow precipitate of arsenite of silver will be formed, which is readily dissolved by excess either of ammonia or nitric acid; so that supposing too much ammonia to have been employed, nitric acid will restore the precipitate. Potash does not possess the inconvenience of ammonia in redissolving the arsenite of silver formed: but there is one inconvenience attending the use of silver; the animal fluids all contain muriatic salts; and, therefore, the fluid contents of the stomach will probably give a white precipitate of chloride of silver when mixed with the nitrate. If, however, the presence of arsenic has been determined by the use of the preceding tests, then the chloride and arsenite of silver must be precipitated together, and the mixture, after being dried, must be subjected to the metallizing process, to be described presently.

(*To be concluded in our next.*)

HEADS *of* SURGICAL LECTURES, *delivered by* SIR A. COOPER, Bart. *at* ST. THOMAS'S HOSPITAL.

(Continued from page 367, Vol. II.)

OPERATION FOR POPLITEAL ANEURISM.—"Since the time of Mr. John Hunter, several slight alterations in the mode of operating for popliteal aneurism have been made, but the principle established by him remains the same; and that great surgeon has the undisputed merit of having substituted a simple and beautiful operation, for one of very considerable difficulty and danger.

"Mr. Hunter used to make the incision in the middle of the thigh, but experience has shewn that it is better to make it one-third of the space downward from the ilium to the internal condyle of the os femoris, because the artery is more deeply seated in the middle of the thigh than it is higher up; besides, there are many anastamosing vessels in the former situation.

"There are four steps in this operation—1st, An incision through the skin, which exposes the sactorius muscle. 2d, The division of the inner edge of the sactorius, exposing the sheath containing the femoral artery, vein, and nerve. 4th, Putting the ligature round the vessel.

"The operation then is performed in the following manner—make an incision about four inches in length, about one-third of the thigh downward from the ilium, which will expose the sactorius; the inner edge of which is now to be separated from the parts with which it is in contact, which will lay bare the sheath, exposing the artery and vein, between which there is a little septum which should be divided: introduce the aneurism needle under the artery, with as little disturbance as possible, to the parts, separate the cellular membrane to about the extent of an inch, and take care not to include the vena saphena in the ligature; which, if taken up, may be known by the irritability which is immediately occasioned.

"Having passed the ligature under the artery, by means of the aneurismal needle, tie it with what is called a surgeon's knot—in these consist the whole operation.

"Should you have separated the artery from the sheath to any considerable extent, it will be necessary to apply two ligatures close to the

cellular membrane, but should the artery not have been much disturbed, one will be sufficient."

January 5th, 1824. — Sir Astley commenced this evening's lecture by observing, that he should allude to a point or two on the subject of the cure of aneurism, which he had omitted to do in the preceding lecture: First, It has been conceived that much may be done by means of medical treatment in retarding the progress of aneurism. This has more than once been attempted by using means to diminish the force of the circulation, which indeed does not at first sight appear improbable. A person with an aneurism of the aorta may live a year or two by observing a strict regimen, and having recourse to occasional bleeding; but, by being kept too low, the patient ultimately becomes exhausted by the subsequent irritability. In these cases, although the momentum of the circulation may evidently be lessened, yet the quickness induced by it more than compensates for the apparent advantage. If we diminish action in force, we increase it in velocity.

" The second point is the degree of probability of preventing the operation by pressure on the aneurismal sac; experience however teaches us, that all such means are chimerical. Nature sometimes performs a spontaneous cure; but the idea of compressing an artery to cause it to adhere, however feasible it may appear, is impossible in practice. We may, therefore, abandon all hope of giving the patient relief by such means.*

" Several projects have been attempted for the improvement of the operation for popliteal artery. Mr. Hunter used a broad ligature.—Mr. Abernethy uses two ligatures, and divides the artery between them. The first produces too much irritation—in the latter, there is a danger of the ligatures slipping off; four instances of which have come within my own knowledge. One happened to Mr. Cline, sen. in this hospital, and in a case of popliteal aneurism it happened to myself.

" It was found by Mr. Jones,† that if a very fine ligature were passed round an aneurism, without wounding the external coat, that, by completely dividing the middle and internal coats, it might be immediately removed without risk, as it would render the artery impervious. This, however, is a mode of operating that must never be trusted to, &c. A ligature capable of being dissolved, and afterwards of being absorbed, is a most desirable object in the tying of arteries.

Sir Astley here observed, that Dr. Physick, of Philadelphia, had used, for this purpose, the untanned skin of ———, and that it had once succeeded. Sir A. himself, has used a catgut ligature in a patient eighty years of age. The wound, he observed, healed kindly, and the man got well—but he has not found it, on repetition, to be superior to a common ligature.

" With respect to cutting the ligature close to the knot, Mr. Hunter once did it, but had afterwards reason to regret having done so, as it produced considerable irritation, &c. The best method is to use a fine ligature, disturbing the artery as little as possible, cutting one of the ends close to the knot, and leaving the other hanging out. Do not use a broad ligature on any account—

* Sir Astley alluded to a machine for compressing the femoral artery, in case of popliteal aneurism. It was used by Sir W. Blizard; for an account of which, see *Med. Phys. Journal*, vol. 8., or Cooper's *Surgical Dictionary*, page 104.

† See Jones on hemorrage—a work that ought to be found in the library of every gentleman of the profession.

bring the edges of the wound in contact; and do not cover them entirely with the adhesive plaster, but leave interstices between them. Do not apply a bandage over them —keep the limb in the semi-flexed position, with the leg inclined outwards;—placing the limb upon the heal is not a good position. Be upon your guard in preserving due warmth, as gangrene in the colder seasons is liable to attack the foot, &c. For this purpose, warm flannel, or woollen stockings, or, if necessary, bottles of warm water, may be used.

" After the operation for popliteal aneurism, the circulation is carried on in the limb by means of the arteria profunda. The sciatic nerve supports the vessels carrying on the new circulation—these anastamose at the knee with the branches of the anterior tibial artery, &c.

" The ligature separates generally from the 12th to the 14th day; subject however to variation. Sir A. has known the ligature only come away on the 28th day after the operation—but then a broad ligature had been applied—and again on the fifth day, but then the artery had previously been inflamed. Although the ligature may come away without hemorrhage, the patient is not safe. The greatest caution becomes necessary at this period, to prevent the parts from being disturbed.

" A ligature on the femoral artery cures aneurisms of the anterior and posterior tibial arteries—not so with those which occur on the foot; it then becomes necessary to tie the aneurismatic vessel both above and below the tumour.

Jan. 7th.—OPERATION OF TYING THE EXTERNAL ILIAC.—Sir Astley's mode of operating is as follows:—he makes the incision about an inch above the abdominal ring, in a semi-lunar form in a line with Poupart's ligament terminating it at an inch and a half at the inner side of the ilium. This lays bare the tendon of the external oblique muscle. The second incision divides this tendon, which exposes the internal oblique. There is now no further occasion for the use of the knife; the finger is to be introduced above Poupart's ligament, for the purpose of raising the external oblique and transversalis muscles, when the space is met with where the spermatic chord quits the abdomen; and here the pulsation of the artery is distinctly felt. The vein is situated to its inner side —that is, the artery lies on the iliac; the vein on the pubic side. The course of the epigastric artery, is on the inner side of the incision. If the artery has been much disturbed, two ligatures should be applied. The anterior crural nerve, which should be avoided in the ligature, is situated in the same sheath with the artery.

A preparation was here exhibited, in which the circulation had been renewed, after the external iliac had been tied.

After the external iliac is tied, the circulation is carried on first and principally by the gluteal artery;—secondly, but with much less power, by the ischiatic artery; the obturator artery also assists, &c. &c.

OPERATION OF TYING THE INTERNAL ILIAC ARTERY. — This operation consists in making a semilunar incision on the inner side of the spine of the ilium, cutting through the abdominal muscles, down to the peritoneum, which is to be turned up. The ureter, which must be carefully avoided, passes directly over the junction of the external with the internal iliac arteries.

There are several histories of the obliteration of the aorta. A gentleman in Dublin presented Sir Astley with a specimen, where the aorta was obliterated within the cavity of the abdomen. The circulation was

carried on by the lumbar vessels. Sir Astley has tied the aorta of several dogs, and they have lived after the operation. And a man, on whom he performed the same, lived forty hours after the operation. The mode of operating on the aorta, is by commencing an incision about two inches above the navel, which is to be avoided by passing round it, and carrying down the incision on the linea alba below it, &c.

Operation for tying the subclavian artery.—The clavicle forms the boundary at this part of the neck, where the subclavian artery is situated. Begin your incision about an inch and a half from the sternal end of the clavicle, so as to make the middle of the bone the centre of it. In the middle of this cut, the internal jugular vein will be discovered, and underneath it the axillary plexus of nerves, lying above the artery, which will be found emerging from the chest, between the scaleni muscles. In performing this operation, Mr. Key found it very useful to divide the clavicular portion of the sterno-mastoid muscle, this afforded such facility to the operation, that no other means were necessary to passing the ligature than the common aneurism needle.

The circulation, after a ligature is placed on the subclavian artery, is carried onward to the arm by the superior scapular artery, &c.

Brachial artery.—This artery is rarely required to be tied for aneurism, but frequently from wounds of the artery, at the elbow-joint, in bleeding. It ought, invariably, to be tied at the middle of the arm, and never at the bend of the elbow. The brachial artery is accompanied by the median nerve, close by its side. The incision is made on the inner side of the biceps muscle, &c.

Ulnar artery.—This vessel requires occasionally to be secured for wounds of the superficial palmar arch. The direction for cutting down upon it is the tendon of the flexor carpi ulnaris, on the inner side of which it lies.

Radial artery.—This artery is exposed by laying bare the tendon of the flexor carpi radialis, and cutting down on the radial side of it.

" Compression to arrest arterial hæmorrhage, is a dangerous step, is attended with considerable hazard, and leads to violent inflammation and gangrene, &c.

Carotid artery.—The practicability of the safe application and removal of a ligature on this artery has been long put beyond a doubt.*

Mode of operating.—An incision is to be made opposite the centre of the thyroid cartilage to within an inch of the clavicle, on the inner side of the sterno-cleido-mastoideus, the margin of which being turned aside, the omo-hyoideus comes into view crossing the sheath containing the vessels, and also the descendens noni. In separating the sterno-cleido-mastoideus from the omo-hyoideus, the jugular vein is seen, which, from its

* The carotid was successfully tried by Sir Astley Cooper, in June, 1808, on a person of the name of Humphries; and by Mr. B. Travers, of St. Thomas's Hospital, on a woman who laboured under an aneurism, by anastamosis, in the left orbit, by which the eye had been protruded from its socket, accompanied by distracting headaches: two small round ligatures were applied, but the artery was not divided—the ligatures separated on the 21st and 22d day, without hæmorrhage, or any alteration in the functions of the brain, and the tumour was absorbed. These two cases set the practicability of the operation beyond a doubt. To render success more certain, it is advised to adopt the operation early and before the tumour has increased to any considerable size, so as to affect the œsophagus or trachea.

If both carotids were tied, the circulation would be carried on by means of the superior and inferior thyroideal and vertebral arteries; this, however, we have not hitherto heard of having been attempted.

vacillating motion, which is increased in respiration, is liable, without great care, to be wounded, presenting the greatest difficulty in the operation. A finger for this purpose is introduced into the wound, to keep the vein out of the way, under which the carotid lies. The greatest care must be taken not to include in the ligature the par vagum, which is situated immediately between the vein and artery, a little to the outer side of the latter, as such a mistake would be attended with the most serious consequence; the recurrent nerve should, in like manner, be avoided, &c. &c.

PROCEEDINGS OF

PHILOSOPHICAL SOCIETIES.

(Continued from page 382, Vol. II.)

ROYAL SOCIETY. — *Nov.* 27. — Dr. D. Cresswell and Prof. Barlow were admitted Fellows of the Society; and the reading of Dr. Jenner's paper was concluded.

Dr. Jenner had intended to present this paper to the Royal Society himself, but was prevented from fully completing it, as to arrangement, by his extensive correspondence on the subject of vaccination. It commences with some general observations on the migration of birds, and particularly with respect to their capability of taking such great flights as migration must require, and which some writers have questioned. Dr. Jenner brings forward various facts, to show that there are no grounds for such doubt; among which are the following: a hobby-hawk was seen in a vessel near Newfoundland; and an owl, seemingly the common brown owl, flying above the Atlantic wave, with as much agility as if pursuing a mouse in the fields; cuckoos, snipes, and other birds, have likewise been seen in the Atlantic; a flock of birds resembling linnets settled on the rigging of a ship, remained awhile chirrupping in concert, and then flew away; geese have been caught in Newfoundland, with their crops full of maize, a species of corn which is not grown but at an immense distance from that island. The discussion of this branch of the subject is succeeded by some remarks on the faculties of discrimination and guidance which must be exercised by birds, in the long flights thus taken, and which, Dr. J. conceives, must be of some peculiar and unknown nature; pigeons, it is observed, which have been taken several hundred miles, completely secluded from the light, by being shut up in a box, will, when set at liberty, immediately return to the place whence they were taken. The periodical disappearance and return of birds has been ascribed to hybernation, but of this Dr. Jenner never witnessed an instance; nor could he ever obtain any satisfactory evidence of it. When birds appear for the season, they are never in the emaciated and weakened state, attended with loss of fat, seen in hybernating quadrupeds when they quit their retreats; but, on the contrary, they are quite vigorous, and as active as at any period. With regard to the supposed immersion of birds in ponds and rivers for the winter, Dr. J. remarks, that their respiratory organs are very similar in structure to those of quadrupeds, and are no better adapted for performing their functions under water. He took a swift about the 10th of August, or on the eve of its departure, and held it under water, when it died in two minutes. It has been conjectured, that repeated alternate immersions and emersions might have the effect of altering the corresponding action of the heart and lungs; but though swifts and martins, it is observed, in reply to this conjecture, frequently splash in the water over which they are skimming, yet they never immerge themselves in it, and indeed if they were to do so, their wings would become so wet as to prevent their flying. The common duck, when pursued and forced to dive repeatedly, by a water-dog, arrives at the surface again much exhausted; as is likewise the case with grebes and auks, after repeated diving. Dr. Jenner had been in the habit of receiving Newfoundland dogs from that country, and had ascertained that they never continued under water for more than thirty seconds, and even then seem confused when they came up. It had been asserted, that negro and other divers remained under water several minutes; but Dr. J. conceives this assertion to be grounded only on a vague guess, and that the time was not measured by a stop-watch.

The next division of the paper relates to the remarkable effect of instinct in birds, of their returning to build on the same spot for many successive seasons. The author took twelve swifts from their nests in a barn, indelibly marked them all, by taking off two claws from one foot of each, and then set them liberty. Some of them were caught on the same spot, at the expiration of a year, and others after two years had elapsed; they were not attended to afterwards, but at the expiration of seven years, from their original capture, one of these marked swifts was brought in by a cat.

Dr. Jenner next proceeds to state, as the cause of the migration of birds, that the tumid and enlarged state of the testes in the male, and of the ovaria in the female, at the season of their departure, prompt the animals to seek those countries where they can obtain proper succours for their offspring;—that, in fact, the nestlings are the objects of this provision. The parent birds leave the countries they migrate from at a time when their own wants are completely supplied; and they remain in those to which they migrate, no longer than suffices for the rearing of their young. Thus the swifts arrive in this country about the 5th or 6th of April, and depart hence about the 10th of August.—Dr. Jenner here observes, as a remarkable circumstance, that Ray, who attributed the migration of fishes to its true cause, that of seeking proper situations for spawning, overlooked the corresponding impulse as actuating birds.—The martins leave this country successively, some continuing to rear a brood much later than others; many of these birds roost in the walls of Berkeley Castle; and Dr. Jenner found, by dissecting a number, taken at the same time, that the ovaria of the females were in a variety of states; in some the eggs being no bigger than hemp-seed, while in others they were as large as peas; the testes of the males exhibited analogous degrees of tumidity.

Swallows are seen flying over pools and waters in spring, in search of the gnats, on which they are then obliged to feed; and not because they have arisen from the waters. Their usual food, like that of swifts and martins, is a species of scarabæus, as the author ascertained by dissection.

Birds that rear several broods in the season, frequently leave the last to perish; thus a pair of swifts, that had brought up three broods in one nest, left the fourth to perish; and the mother came back in the following year, threw out the skeletons, and laid in the nest again. Many nests of late birds, of various species, are deserted in this manner by the parent animals; but the latter thus leave the country when it abounds with their own food.

The young birds, it is remarked, cannot be directed in their migratory flights by the parents, but must be guided by some unknown principle: if it be admitted in the case of swifts, martins, and other birds associating together in flocks, that the young may be directed by the motions of their fellows, yet this cannot be the case with the nightingales, nor with the cuckoos, who, though reared in the nests of many different birds, are regular migrators. The parent cuckoo has left the country before its young are reared, always departing early in July.

Dr. Jenner next gives some particulars relative to the enlargement of the testes and ovaria in birds, supplementary to those which have been pointed out by Mr. John Hunter. In those birds who pair but for a short time the testes are small, while in those with whom the connubial compact is of long continuance, they are large. In the cuckoo, a polygamist, and who continues with the female but for a very short time, the testes are of the size of a vetch only; but in the wren, whose attachment to his mate extends from spring to autumn, they are equal to a pea in magnitude; thus much larger in the latter than in the former, in proportion to the size of the bird. A continued supply of generative power is required in birds who pair for a long time, in case the brood should be destroyed—but in those like the cuckoo this provision is unnecessary.

(To be continued.)

Price Current of East India Produce for December, 1823.

	£	s.	d.		£	s.	d.
Cochineal .....lb.	0	3	6	to	0	4	6
Coffee, Java ..cwt.							
——— Cheribon...	3	15	0	..	4	5	0
——— Sumatra....	3	12	0	..	4	0	0
——— Bourbon ...							
——— Mocha	5	0	0	..	8	0	0
Cotton, Surat...lb.	0	0	6	..	0	0	8
——— Madras....	0	0	6	..	0	0	7
——— Bengal	0	0	6	..	0	0	7
——— Bourbon ..	0	0	10	..	0	1	3
Drugs, &c. for Dyeing.							
Aloes, Hepatica cwt.	12	0	0	..	25	0	0
Anniseeds, Star..	4	0	0	..	3	0	0
Borax, Refined	3	0	0	..	2	15	0
——— Unrefined or Tincal	2	5	0	..	2	15	0
Camphire unrefined	9	0	0	..	8	10	0
Cardemoms, Malabar .....lb.	0	2	7	..	0	3	3
——— Ceylon	0	0	10	..	0	1	3
Cassia, Buds cwt.	16	10	0	..	17	0	0
——— Lignea....	7	11	0	..	7	14	0
Castor Oil....lb.	0	0	9	..	0	2	0
China Root cwt.	1	15	0	..	2	0	0
Coculus Indicus	3	0	0	..	2	15	0
Columbo Root ..							
Dragon's Blood .	9	0	0	..	26	0	0
Gum Ammoniac, lump	7	0	0	..	9	0	0
—— Arabic	5	0	0	..	6	0	0
—— Assafœtida	3	0	0	..	12	0	0
—— Benjamin..	3	0	0	..	5	0	0
—— Animi cwt.	3	0	0	..	10	0	0
—— Galbanum ..							
—— Gambogium	14	0	0	..	15	0	0
—— Myrrh	7	0	0	..	18	0	0
—— Olibanum..	2	10	0	..	4	10	0

					£	s.	d.
Lac Lake ....lb.	0	0	9	..	0	2	0
—- Dye	0	3	0	..	0	5	6
—- Shell, Block	2	0	0	..	3	0	0
—- Shivered. ...	2	5	0	..	5	0	0
—- Stick	0	15	0	..	1	10	0
Musk, China..oz	0	6	0	..	0	15	0
Nox Vomica cwt.	1	5	0	..	1	10	0
Oil Cassia.....oz.	0	0	8				
—- Cinnamon ..	0	12	0	..	0	9	0
— Cloves	2	0	0				
— Mace.....	0	1	0				
—- Nutmegs	0	2	0	..	0	2	6
Opium .....lb.							
Rhubarb	0	1	6	..	0	5	3
Sal Ammoniac cwt.	4	10	0	..	4	15	0
Senna.....lb.	0	0	6	..	0	2	6
Turmerick, Java, cwt.	2	0	0	..	2	15	0
——— Bengal	1	8	0	..	2	14	0
——— China	2	10	0				
Zedoary							
Galls, in Sorts.....	7	0	0				
——- Blue.....	7	10	0	..	8	15	0
Indigo, Blue....lb.							
——— Purple and Violet.....	0	8	7	.	0	8	9
——— Fine Violet							
——— Good Ditto.	0	8	0	..	0	8	9
——— Fine Violet and Copper	0	7	0	..	0	7	6
——— Good Ditto.	0	8	0	..	0	8	6
———Ordinary do.	0	7	0	..	0	7	6
——— Consuming qualities	0	5	0	..	0	6	0
——— Madras, fine and good	0	5	9	..	0	8	5
Rice, Bengal..cwt.	0	10	0	..	0	11	0
Safflower	14	0	0	..	16	0	0
Sago	0	16	0	..	1	4	0
Saltpetre, Refined	1	6	6				
Silk, Bengal Skein, .. lb.	0	13	1				
—— Novi	0	14	1	..	1	1	3
—— Ditto White..	0	14	1	..	1	0	5
—— China	0	18	1				
—— Organzine....	1	10	0	..	1	16	0
Spices, Cinnamon,lb.	0	6	7	..	0	6	8
——— Cloves	0	3	10	..	0	4	0
——— Mace.....	0	4	10				
——— Nutmegs ..	0	3	5	..	0	3	6
——— Ginger cwt.	0	17	0	..	1	0	0
——— Pepper Bk. l.							
——— —— White	0	1	1	..	0	1	4
Sugar, Yellow cwt.	1	7	0	..	1	9	0
——— White	1	10	0	..	1	16	0
——— Brown	1	0	0	..	1	3	0
——- Manilla and Java	0	18	0	..	1	0	0
Tea, Bohea ....lb.	0	2	4	..	0	2	5
—- Congou	0	2	6	..	0	2	7
—— Souchong	0	3	9	..	0	4	9
—— Campoi.....	0	3	3	..	0	3	10
—— Twankay	0	3	5	..	0	3	8
—— Pekoe	0	5	3				
Tea, Hyson Skin ..	0	3	4	..	0	3	11
—— Hyson	0	3	9	..	0	5	11
—— Gunpowder ..							
Tortoiseshell.....	1	12	0	..	2	5	0
Wood, Saunders Red ton	9	0	0	..	10	0	0

(To be continued Monthly.)

RESIGNATIONS AT GUY'S HOSPITAL.—Mr. Forster and Mr. Lucas, Surgeons.

In the Medical Department, Dr. Laird, who is succeeded by Dr. Bright.—The successors to the former will be published in our next.

MARRIED,

At St. Mary-le-bone, Thomas Jackson, Esq., Surgeon, R. N. to Isabella, youngest daughter of R. West, Esq., of Edgware-road, Cumberland-gate.

DIED,

On the 21st ult., Dr. John Rogerson, of Wamphray, first physician to the Emperor of Russia.

TO CORRESPONDENTS.

Perhaps SURGEON ODLING *himself may favour us with the Broad Wall Case of* ASTHMA. *We shall defer publishing M. M.'s remarks on the* post mortem *appearances, with this view, for a week or two longer.*

"RICARDUS'S" *Eulogia should have been made known in other quarters; we puff nothing ourselves, directly or indirectly, nor do we much admire those who do.*

R. R. *is received.*

All papers, &c. forwarded us, but not inserted, or otherwise noticed, since November last, if not claimed within the present month, will be forthwith destroyed.

OBITUARY EXTRAORDINARY. — *Expired, towards the close of the last year, of the complicated disorders, known to farriers by the names of* gripes *and* frets, *after a severe struggle, in Windmill-street, The* "MEDICAL INTELLIGENCER," *a production as dull and monotonous as it was unprofitable and obscure. Although the periodical in question had contrived, under the most excruciating tortures, to keep its head up above two years, it was, during its puny existence, as little known or read by the medical profession, as it is now missed or lamented.*—De mortuis nil nisi bonum.

London:

Printed by W. LEWIS, 21, *Finch-lane;*

For COX and SON, St. Thomas's-street, and 39, High-Street, Southwark. Sold also by Sherwood, Neely, and Jones, Paternoster-Row; Simpkin and Marshall, Stationers'-Court; John Cox, Berner's-street, Oxford-Street; J. Shaw, Fetter-lane, Fleet-street; Callow and Wilson, Gerrard Street, Soho; W. Stewart, South Bridge-Street, Edinburgh; J. Cameron, opposite the College, Glasgow; Hodges and M'Arthur, Dublin, &c. &c.

THE WEEKLY

Medico-Chirurgical Review & Philosophical MAGAZINE.

No. LI.] SATURDAY, JANUARY 24, 1824. [*Price 4d.*

" FLORIFERIS, UT APES, IN SALTIBUS OMNIA LIBANT
OMNIA NOS, ITIDEM, DEPASCIMUR AUREA DICTA."

Successful Case of Amputation at the Hip-joint: By JAMES SYME, *Member of the Royal College of Surgeons, and Lecturer on Anatomy in Edinburgh.—(Edin. Med. and Surg. Jour.)*

We gave the history of this case, with some account of the operation, under the head of " HOSPITAL REPORTS," in our 36th number, to which we beg leave to refer our readers. We now fulfil the promise made at that time ' to communicate further particulars,' as soon as they might transpire.

" I had not seen or heard of him," (the patient) observes Mr. Syme, " for many months, when one day, in the latter part of August last, his father stopped me in the street, and told me that his son had made up his mind to the amputation. I called soon afterwards, and found the patient fully resolved on being delivered from a disease which had confined him to his bed for more than two years, and was daily getting worse and worse. I therefore subjected the limb to a very careful examination.

The result of the examination was, that a considerable alteration had taken place since the last time Mr. Syme had seen it. " The swelling was greater than ever, and now extended to within an inch of the trochanter major. A profuse glairy discharge was poured out from many openings on the posterior and outer sides of the limb, and abscesses were constantly forming farther and farther up towards the joint." When Mr. Syme saw him, there was one which had just opened near the tuberosity of the ischium, and another was beginning to point not far from the trochanter major. The appearance of the patient was also altered for the worse—being still more emaciated; and, although five feet eight inches in height, he still retained the character of a boy.

" Notwithstanding all these unfavourable circumstances, I still considered the operation adviseable, since the lad's destruction was otherwise inevitable; and this manner afforded him a chance, which was rendered better by his own good spirit, and determination to live. His digestive functions continued tolerably healthy; and Dr. Abercrombie, who had the goodness to visit the patient, in whom he took an interest, gave me still farther encouragement, by coinciding as to the propriety of operating.

" The next question was, at what part of the limb should amputation be performed?

" In the earlier parts of the disease, nothing forbade removal below the trochanter; but now the case was very different.

Under every appearance of the case, amputation at the hip-joint appeared to Mr. Syme and Mr. Liston to be a justifiable operation, notwithstanding it had rarely or never succeeded in private practice, still this was no reason it should not do so.*

METHOD OF OPERATING.—The day being fixed, (September 2d,) for performing the operation, it was done in the following manner, assisted by Mr. Liston, the friend and instructor of Mr. Syme, in the presence of Drs. Abercrombie, Anderson,

* When Mr. Liston, two years ago, tied the subclavian artery with success, for the first time in Great Britain, that operation was looked upon as desperate as amputation at the hip-joint is now. But since then, instances of his success have been quite common in the records of Surgery.

and Scott—and Mr. Marshall, Surgeon to the Forces.

"Having, with some difficulty, placed the patient upon a table, so that the affected limb was perfectly free, and ascertained that Mr. Liston was ready to make pressure when and where required, I introduced a narrow knife, about a foot long in the blade, which was sharp on one side only, at the proper place for transfixing the limb; but being prevented by the bent position in which, owing to long habit, the patient obstinately retained it from passing onwards in the direction of the tuberosity of the ischium, by the neck of the femur, I lost no time in the repetition of fruitless attempts, but instantly changed my plan.

"Without removing the point of the knife, I brought down its edge obliquely, and, by a sawing motion, quickly cut back, in a semicircularly direction, to the tuberosity of the ischium, up along the femur, and round the trochanter major, so as to form, very speedily, identically the same flap which would have resulted from that I meant to have followed.

"While Mr. Liston covered the numerous cut arteries with his left hand, and compressed the femoral in the groin by means of his right, I gathered together all the mass of undivided parts on the inner side of the thigh, with my left hand, and then insulated the nick of the bone, by passing the knife close past its lower surface. I now cut down close along the bone for some way below the trochanter minor, and lastly made my way outwards obliquely, so as to form a good internal flap.

"Mr. Liston, holding aside the flaps, I made a single cut with my long knife upon the head of the bone, which started with a loud report from its socket, as soon as abduction was performed. Finally, I passed the knife round the head of the bone, cut the triangular and remaining portions of the capsular ligament; and thus completed the operation, which certainly did not occupy, *at the most*, more than a minute."

This was certainly very expeditious work, evincing considerable anatomical address in desarticulating the head of the femur from the acetabulum—still, we cannot conceive how the operation could be thus completed, when only its first and least important stage was effected.—However

"I then proceeded, without delay, to take up the arteries, &c.

"As soon as the femoral, which had been completely commanded by pressure in the groin, was secured, Mr. Liston relaxed his hands, in order that we might form some estimate as to the size and number of bleeding vessels, and then, had it not been for thorough seasoning in scenes of dreadful hæmorrhage, I certainly should have been startled, prepared as I was to expect unusual vascularity, owing to the extensive action so long carried on in the limb.

"It seemed, indeed, at first sight, as if the vessels, which supplied so many large and crossing jets of arterial blood, could never all be closed. It may be imagined we did not spend much time in admiring this alarming spectacle. A single instant was sufficient to convince us, that the patient's safety required all our expedition; and, in the course of a few minutes, hæmorrhage was effectually restrained, by the application of ten or twelve ligatures.

"The flaps were now brought together, and retained in contact by five or six stitches. Some dry caddis was laid over the wound; and, lastly, I applied a single-headed roller obliquely round the body and stump, moderately tight, so as to afford proper support to the flaps; and then we lifted into bed the patient, who was wonderfully little exhausted.

The operation was peformed at 12 o'clock; and, during the remainder of the day, nothing occurred of much interest excepting occasional vomiting, which, at the time, might be attributed to the effects of an opiate given about two o'clock, on account of pain and restlessness. In the evening, some bleeding appeared, but soon ceased. The patient, a short time afterwards, complained of much pain and tightness in the stump, that the bandage and two stitches were obliged to be cut, which allowed some clotted blood to escape, and procured considerable relief. The wound was afterwards dressed as before. Mr. Liston saw the patient at 12 o'clock that night—he was very low, his foot cold, and his pulses hardly perceptible. He, however, gradually recovered, under the moderate use of stimulants, and the following morning, as far as regarded strength, was better than since the operation. The stomach continued irritable, rejecting instantly what-

ever was introduced into it. An injection, containing 40 drops of laudanum, was prescribed. Dr. Abercrombie visited the patient soon afterwards, and recommended a persistence in the use of opiates, solid and fluid; the good effects of which were soon made manifest, by the vomiting gradually subsiding, and the stomach beginning to retain beef tea and other fluids in small quantity. The injection was repeated in the evening, and a grain of solid opium continued to be given by the mouth every three or four hours.

On the second day after the operation, there was a decided improvement in all respects. On the third, the wound was examined, when it looked perfectly well. The discharge which, at first, was thin and watery, gradually became thicker and more healthy—opium discontinued after the first week—bowels brought into a good state by the use of turpentine injections—the patient's appetite, sleep, and pulse continued to improve.—"In short, every thing went on well."

The ligatures began to separate about the 12th day, and by the third week they were all withdrawn.

To be brief, about a month after the operation, the wound being nearly healed, when every thing promised a speedy restoration of the patient to health, symptoms of ascites made their appearance, which carried off the patient at the expiration of the eighth week from the operation, notwithstanding every endeavour to combat them with success.

Post Mortem Examination.—The body was examined by Mr. Syme, in the presence of Dr. Abercrombie. In the cavity of the abdomen, a quantity of fluid, sufficient to fill a large hand-bason, was found. The liver was more than twice its usual size, very hard, yellow, and completely altered in its structure, there being no appearance of acini. The gall-bladder contained a quantity of fluid, more resembling serum than bile. The spleen was double the natural bulk, but sound and healthy. The intestines were exceedingly thin, and looked as if destitute of a muscular coat. The lungs, heart, and all the other viscera, were, to appearance, perfectly sound.

In concluding the history of this case, Mr. Syme offers the following remarks, viz. that amputation is discountenanced by most surgeons on the following grounds:—

"1. It is too great a shock for human strength to support. 2. The hæmorrhage, which must attend so great an operation, where no tourniquet, can be applied, will render the patient's recovery, should he even get over the immediate shock, very tedious, if possible. 3. The confusion which must be occasioned in the circulation, by removing instantly so great a portion of the body, cannot but produce some immediate fatal disorder and congestion. 4. The extent of cartilage and synovial apparatus must prove an almost insuperable obstacle to re-union. 5. The mutilation inflicted *renders life miserable* and not desirable. 6. The operation is *never necessary*.

In answer to the four first of these objections, Mr. Syme appeals to the case of William Fraser (his late patient).

1. He was weak and emaciated to an extraordinary degree, yet he stood the shock well. 2. Notwithstanding the extreme vascularity of the limb, the hæmorrhage did not exceed a few ounces. 3. Though the limb removed, owing to its having so long engrossed the attention of the system, may be regarded an equivalent to *half* of the body, no immediate disorder occurred in the circulation. 4. The wound healed kindly and soundly over the acetabulum.

After other appropriate remarks in refutation of the illogical reasoning of the above conjectures, Mr. Syme concludes by observing that, he is no advocate for operations whose only interest is the knife, which, however, he admits to be too often a great, though no less a necessary evil.

"Yet," he observes, "I feel no hesitation in recommending, to the serious attention of operating surgeons, amputation at the hip-joint, although it be the greatest and bloodiest operation in surgery, as I am quite sure that there is sometimes no other mode of prolonging existence."

Mr. Syme says, he firmly believes, that, if the operation be done properly and, above all, quickly, its success will be general, if not uniform.—*(See our Hospital Reports, page 47, for a recent case.)*

Medico-Chirurgical Transactions. Vol. XII. Part II.

(Continued from Page 26.)

On the Anatomy of the Eye. By Dr. Jacob, *of the University of Dublin.*—The author of this excellent paper is well known as the discoverer of a delicate membrane, between the choroid coat and the retina, now usually called *Tunica Jacobi*, and which is here for the first time beautifully figured. He has undertaken, in this Essay, to investigate some of the points connected with the anatomy of the eye, which have been rendered interesting by the difference of opinion among scientific anatomists. The first point he takes up is,

The passage of the Optic Nerve through the Sclerotica.—Dr. Jacob thinks that the so-called *lamina cribrosa* is nothing else than the extremity of the optic nerve, where the firmer tubercular portion is discontinued. Besides, if the sheath of the nerve be slit up through the sclerotic into the globe of the eye, the nerve does not appear to cease with a rounded apex behind the lamina cribrosa, as has been represented, but is obviously continuous without any line of separation. Again, the lamina cribrosa, as it is called, has the same white colour as the nerve, and if compared with a section of the nerve at some distance, is not to be distinguished. It appears, therefore, that Albinus, Haller, Zinn, Cuvier, C. Bell, and others, have made a mistake in their descriptions, probably, from washing away the retina, and cutting off the nerve on the outside close to the sclerotica.

Canal of Petit.—The canal of Petit, according to Dr. Jacob, is formed in consequence of the folds of the corona ciliaris, consisting of two layers of hyaloid membrane, receiving injected air from one to another. That the capsule of the lens has no share (though the contrary is usually believed) in the formation of the canal of Petit, he concluded from filling the canal with air, keeping it some days in water, and then, with great care, removing the lens included in its capsule, when he found that the air did not escape from the cells, and he could pass a small probe all round in this canal.

Aqua Morgagni.—Dr. Jacob seems to talk doubtfully of the existence of this fluid, except in a state of disease, or after death. In the eyes of sheep or oxen, while yet warm, no trace of it is to be found, though it collects in them soon after death. When it exists at all, he thinks it is confined to the anterior part.

Membrane of the Aqueous Humour.—The author thinks the lining membrane of the cornea is precisely similar to the capsule of the lens in its elasticity, and almost indestructible transparency. It is best seen in the eye of the horse, and can be detached in shreds, merely by scraping it. [See the following article on the Iris.]

Yellow Spot, Fold, or Foramen, of Soemmerring.—On examining under water the eye of a young man, five hours after death, the cornea and iris being cut away, and the lens removed from its place, "the optic nerve presented unequivocally the appearance of being drawn or folded, in form of a cross or star, with a dark speck in the centre, surrounded by a pale, yellow areola." The promi-

nence of the fold was also ascertained by its shadow. No hole could be discovered where the dark speck was; for even after some days maceration in water, a probe could not be passed without tearing the membrane. On floating the membrane in water, after removing the nervous matter by maceration and agitation, the situation of the spot could no longer be ascertained.

Structure of the Iris.—The muscularity of the iris has long been a subject of keen dispute. The tissue of posterior radiating striæ, which Manoir and others suppose to be muscles, Dr. Jacob proved to be vessels, by successfully injecting them; and he inclines to think, that the muscular power probably resides in the remarkable structure in front. He has presented beautiful preparations in proof of this, to the Hunterian Museum. He has also demonstrated, that the black pigment behind the iris is confined by a very delicate membrane, which Dr. Jacob is seemingly of opinion, is the secreting membrane of the aqueous humour.

Membrana Pupillaris.—Dr. Jacob's observations have led him to reject the idea that this membrane disappears about the seventh month, or that it is destroyed by a rent, as supposed by Blumenbach. He has usually found it present in most newborn infants, and gives a fine drawing of an injected one of the ninth month. He says the vessels become first obliterated, and then the membrane is absorbed.

On the Cause of Formation of Worms in the Human Intestines, &c. &c.

(Concluded from Page 25.)

Another observation, not less interesting, is of the following purport:

"For thirty years and more, I have known a lady, still a well-looking, healthy woman, who has given birth to a dozen of vigorous children, six boys and six girls. Whenever this lady was pregnant of a girl, she was constantly drawn away by an irresistible appetite to rich, milky, and mealy food; at the same time she was afflicted with the usual accidents of worm diseases; nay, until her lying-in, she was sometimes found to have evacuated several maw-worms. Whenever she was pregnant with a boy, none of these incidents ever happened; on the contrary, she felt, in this case, an invincible dislike to these nutriments. At last, a six-times repeated lying-in had taught her, at every following confinement, with amazing exactness, to foretel the sex of the infant."

But, how evidently soever these two related instances seem to prove that the abundant use of milky and mealy food is an inducing cause to the formation of worms, yet we can never look upon this otherwise than as its being only the one factor, or rather the half of the one factor, namely, of the substantial one, and still the individual bodily constitution remains an object of peculiar interest; for it is only when this is likewise calculated for the formation of worms, that such a formation actually can take place. The dish of pease or lentils, which appeases the stomach of the day-labourer, certainly will not be more flatulent than the pease or lentil soup of which the hypochondriac scarcely takes a mouthful. Nevertheless, the first does not feel from this the least oppression; his bowels remain unhurt, whilst the latter is tormented in such a manner, by some cubic inches of air that cannot easily find their issue, as if he were to be delivered of the antichrist. In this very same manner the nutriments, with regard to the formation of worms, operate very differently in the different bodily constitutions. In Tyrol, the country people make use of flesh meats in their meals, only four or five times a year, and yet, for aught I know, they are not very particularly afflicted with worm diseases. The nourishment of the convicts in the house of correction in this place (Vienna) consists merely of legumin-

ous and mealy food, and with this they are compelled to labour, and even very hard; which they also often do in the open air, the good quality of which is particularly taken care of. Counsellor Guldener administered to this house, in the quality of physician, during the space of fourteen years, and assured me, that among those prisoners worm diseases but very seldom occurred. Milk, and its products, butter and cheese, as we have already observed, then, would perhaps be the only nutriment which, much more than any other food, could be looked upon as favouring the formation of worms. Moreover, of all sorts of vegetable and animal substances, milk seems to be the richest in nutritive essence. The frequent and early formation of the cheese-mites, already strongly speaks in favour of this supposition, though I only communicate it as such, and by no means intend to give it as a fact.

One instance, however, I am fully convinced of. It is this, that a meagre diet, or such a one as produces but little nutrition, is not at all favourable to the formation of worms, especially of ascarides, and that worms never know a greater foe to them than the starving stomach of the body that harbours them. Upwards of two hundred carp *(Cyprinus carpio, L.)*, and almost five hundred tench *(Cyprin. Tinca. L.)*, have been submitted to our examination. Only half a dozen of the latter were found to contain worms. It is true, some carps also were found with worms, but they were only such as are caught fresh in an adjacent lake, and brought to market here under the name of sea-carps. Of all the Danube carps, there was not a single one with worms. The tenches and carps, however, which the city of Vienna is usually supplied with, are generally caught in ponds, from thence brought to this place, and during a pretty long time kept in caufs on the Danube, in order to free them from a certain muddy taste, which they get in the ponds. During this watering or freshing, they are starving, and very often there is not the least track to be found in their entrails of that slimy substance commonly observed in other fishes of their species. It may be said, that their entrails have been washed out, whereas those of other fishes newly caught in the Danube, for instance those of the barbels *(Cyprin. Barbus L.)* are thickly cast over with slime, but also are often entirely crammed up with worms. A few years ago, some gold fishes were caught in a free fish-pond, near Schönbrunn, and put into a glass with clear water. Most of them died some days afterwards. In one of them, a worm had not only worked itself through the intestines, but also through the muscles and the skin of the fish; meeting with no nourishment in the water, and finding, out of the animal body, the end of its creation, probably while its hinder part was still fixed within the body of the fish, it returned to it again, and from without pierced through it. Thus hanging at the outside of the fish, it is still shown in the collection of *naturalia* of this place. In other fishes these worms had only worked themselves through the entrails, and were hanging either at the inner side of the belly, or at the outside of the bowels. In the imperial cabinet of natural curiosities at Vienna, there is kept throughout the whole fine season, a vast quantity of birds, of all descriptions and species, for the purpose of establishing new researches into natural history. In those birds, which during a considerable length of time are kept in cages, there have very seldom been found any worms; but it is also here to be observed, that with

all possible care and trouble, one cannot get them the very same food which they procure themselves, when in the state of natural liberty.

If, then, a bad quality of food, generally is to be considered as a cause of the formation of worms, we may not bring under this head any such diet, which upon the whole affords too little nutrition, but solely that food, which, though producing a sufficient, nay, with regard to the body that takes it, a superfluous quantity of nutritive substances, yet cannot be duly prepared by the stomach, nor its separated nutritive substances be entirely taken up by the absorbent vessels, and rendered homogenial with the mass of the human body, in this case given. The very same dish, consisting of potatoes, pease, lentils, beans, and other leguminous or mealy food, which affords a most excellent nourishment to the laborious countryman, would, by a frequent use of them, cause worm diseases, besides a great many other complaints, to the idle and more feeble citizen.

Moreover, the notion that leguminous or mealy food should be less nourishing than fresh meats, is a mere prejudice of the modern schools. The above-mentioned instance, relating to the inhabitants of Tyrol, who certainly are a stout, healthy, vigorous set of people, is sufficient to remove every doubt on this subject.

In former times it was likewise supposed, that the seed of worms was brought into the human body by the use of worm-eaten fruit, the dirt of any such worm abiding inside the fruit being considered as being its egg; a supposition which, in our present times, certainly does not require any refutation.

However, if once worms are formed out of themselves, or if they have procreated themselves within the human body, they can, even when the causes that first brought on their formation are removed, propagate by copulation, since all worms, known to abide in the intestines, are provided with genital organs. But to this propagation circumstances must also be favourable; so, for instance, we see in children very often worms, that during a long while baffled all possible antidotes, disappear of themselves, when those children are ripening to a more mature age. In the same manner we see them extinguished in adults, whenever any change, either of clime or diet, takes place with them. Human diseases, or any distempers, are not seldom contributive also to the destruction of worms, of which the following part of this work will afford me an opportunity to communicate some examples.

On the Condensation of the Gases. By Mr. Faraday.—The discovery of the condensation of the Gases, by Mr. Faraday, of the Royal Institution, is highly worthy of notice, both from its singularity and from the results to which it may lead.

Sulphurous Acid, he found to be a very limpid, colourless fluid, and remaining so at 0° Fahr. When a sealed tube containing it was opened, part of it evaporated rapidly, cooling by its evaporation the other part, which however also dissipated in vapours, emitting the odour of sulphurous acid, and leaving the tube quite dry. A piece of ice dropped in the fluid acid made it boil, from the heat extricated by their union.

Sulphuretted Hydrogen is also a colourless and very limpid fluid. When exposed to the air, it immediately rushed into vapour, the pressure of which seemed nearly equal to that of 17 atmospheres at the temperature of 50°. At 0° the acid continues in the fluid state.

Carbonic Acid is a limpid, colour-

less matter, extremely fluid, and distils readily and rapidly at the difference of temperature between 32° and 0°. It remains liquid at the greatest cold to which it has been subjected. Its vapours exert a pressure of 36 atmospheres at 32°.

Euclorine, is a very fluid, transparent substance, of a deep yellow colour, which, when exposed to the air, instantly passes off in vapour, causing the tube containing it to burst with considerable violence.

Nitrous Oxide is a very limpid colourless fluid, and so volatile that the warmth of the hand makes it easily pass into vapour, which is again rapidly condensed by the application of a mixture of ice and salt. It boils by the difference of temperature between 50° and 0°. It remains fluid at 10°; when a tube containing it is opened at one end, it immediately rushes out in the form of vapour, the pressure of which is equal to about fifty atmospheres, at 45°.

Cyanogen is a limpid, colourless fluid, remaining so at 3°. When the tube in which it was prepared was opened, the expansion within did not appear to be very great, and the liquid passed with comparative slowness into vapour, but producing great cold. The fluid acid does not at first mix with water, but floats on it.

Ammonia.—Chloride, or muriate of silver, possesses the property of absorbing a large quantity of ammonical gas, which it gives off when heated to about 100°. When a portion of this compound was put into a bent tube, afterwards hermetically sealed, and was heated, it gave off the alkali, which condensed in the opposite limb, kept cold by ice. Liquid ammonia, as thus prepared, is transparent and colourless; but, as the chloride cools, it immediately passes off in vapour and combines with it, producing a curious combination of effects. The chloride, by absorption of the vapour, has its temperature elevated nearly to 100°: while at the distance of a few inches, considerable cold is produced by the evaporation of the ammonia.

Muriatic Acid is a colourless fluid, passing off in vapour on exposure to air, the pressure of which is equal to nearly forty atmospheres, at the temperature of 50°.

Metamorphosis of Vegetables into Animals. By M. Gaillon.*—"It has been ascertained by several naturalists, that a great number of the *confervæ* are disorganised during the summer, and that the greenish globules, which are seen in their interior, become animalculæ, which swim for a certain period in water, are susceptible of irritation on being touched, &c. &c.; and, at the end, reunite themselves to form new *confervæ*. M. Gaillon, in his new memoir, presented to the Institute of France, has made observations, which fully confirm those previously made on this singular order of beings, which seem to destroy all traces of the distinction so feebly marked between the animal and vegetable creation. The species, to which he has applied his researches, is the genus ceramion of Decandolle. Dillwyn has described them under the name of conferva comoides. They cover the mud on the sea-coast at Dieppe. The corpuscles, which are of a greenish colour, M. Gaillon has observed, leave the filaments of the conferva comoides at frequent intervals, and assuming the form sometimes of an oval, sometime of a parallelogram, move about slowly or rapidly, and change their direction, like the cyclades and other animals of that class. He has even forced these corpuscles from the

* Revue Medicale.

filaments before their time, and has observed the same phenomena. M. Mertens, a celebrated botanist of Germany, has made the same observations. Last year he exhibited, to several *scavans*, the conferva mutabilis; on the 3d of August, in the state of a plant; on the 5th, disorganised, in the form of molecules, possessing the power of locomotion; reunited on the 6th, in the form of simple articulation; and, on the 11th, constituted again, in their primitive form."

HEADS *of* SURGICAL LECTURES, *delivered by* SIR A. COOPER, Bart. *at* ST. THOMAS'S HOSPITAL.

(Continued from page 30.)

"The three operations before observed, which are occasionally resorted to in the cure of hydrocele, are seton, incision, and injection.—Setons, however, are very rarely used, although now and then they are not without their advantage.—The seton should be made in the following manner, viz. take a curved needle and carry it into the scrotum and tunica vaginalis, just at the point where the trocar had been previously introduced, and include two inches above the point where the needle enters and bring it out sufficiently long. From this mode of operating inflammation generally ensues, as the water gradually escapes, adhesion of the tunica vaginalis proceeded—this operation, however, has been abandoned for better means, and is only used in those young persons whose hydroceles do not give way to the absorbent plan.

"The next plan of operating is by incision; but that by injection has superseded all others, for which we are indebted to Sir James Earle, who, thinking on this subject, conceived that injection of the tunica vaginalis was likely to be the best means of producing an adhesion and preventing the further formation of the disease.

OPERATION, &c. BY INJECTION.—"The instruments required for this operation are an elastic bottle with a stop-cock, a trocar and canula. The elastic bottle should be of a moderate size, and only half the fluid contained in it should be thrown in at a time, lest the action of the cremaster should force a part of it into the cellular tissue. Should this happen, inflammation and sloughing are likely to take place around the part at which the canula is introduced. The trocar should be two inches long, and the canula should be of a small size. The trocar and canula, after used, should be put separately into the box, or they will soon contract rust, and be unfit for use.

"The fluid used for the injection should be of the stimulant kind. If port wine be used it should be added to an equal quantity of water. If, however, it be old port, the proportions may be five parts of wine with three of water—but, should the former be such as is usually procured at taverns and wine-vaults, a less proportion of it must be used, in consequence of the astringent ingredient with which it is commonly found adulterated, as otherwise the injection would be too stimulating. Brandy or spirits of wine may also be employed—if the latter, one part to fifteen of water. The injection generally used in this hospital is the sulphate of zinc, in the proportion of one drachm to a pint of water—and this, because we are better enabled to judge of its degree of strength, than that of others which are subject to much variation.

"It must not, however, be supposed that one fluid will answer as well as another; for I remember a case in which an injection of milk

was used, on the supposition of its being a bland fluid, that produced the most horrible inflammation. Be upon your guard, therefore, against making experiments of this kind.

" When you inject for hydrocele, the patient should be placed in the recumbent posture, which will enable you to perform the operation more steadily; and, before the trocar and canula are introduced, make it a rule to squeeze the scrotum and tunica vaginalis, so as to render the part containing the fluid more distinct and tense—the trocar and canula are then to be obliquely introduced, after the same manner as in the palliative mode of treatment.—Having passed the trocar and canula into the tunica vaginalis, withdraw the former and push the latter alone carefully upwards, to guard against doing any injury to the testicles or spermatic cord. The tunica vaginalis should be nipped round the canula to prevent the instrument from being diverted, and thus injecting a portion of the fluid into the cellular membrane. This precaution being taken, the injection is to be gradually thrown up, the stop-cock turned to confine it within the tunica vaginalis, and the scrotum must be moved from side to side, in order to diffuse the the fluid over every part of the surface, which should be suffered to remain about four or five minutes."

(Hydrocele to be concluded in our next.)

TO THE EDITORS OF THE MEDICO-CHIRURGICAL REVIEW, &c. &c.

Gentlemen.—As a reader of, and subscriber to, your respectable and spirited weekly publication, I trust, for the honour of the senior, as well as of the junior portion of the profession, who are the most apt to be misled, you will favour me with inserting, as early as possible, the following plump refutation of a barefaced falsehood, however derogatory to your dignity it may be to notice the scurrilous object that gives rise to it, viz. a late spurious periodical, that set out with levelling its calumnious innuendoes against the most respectable and most worthy and irreproachable characters, to attract a transient notice. The *work* in question, without further animadversion, will stand sufficiently identified in the following *œdematous* paragraph—the following vitiated piece of *fungus*, piping hot from the corner of Norfolk-street, in the Strand, (which lately appeared in a bloated preface to the work,) *not a hundred miles* from Messrs. Newbury and Co.'s &c. &c.

" An attempt has been made by some of the members of the profession," says the sapient would-be invisible great-little-man, " to create a prejudice against the L-NC-T, because *its conductors* are unknown —and it is their intention to remain so ! ! !"

Now, gentlemen, to give this consequential nothingness another *stab*; or rather, to *strike a light* on the subject, be it known to all whom it may concern, that the " *unknown conductors*" of the L-NC-T, who have " opened communications with France, Italy, and Germany," or, what is more apparent, with St. Giles', Billingsgate, and the back slums of the Seven Dials, is neither less nor more than the identical *Mister* WAKELY, of the aforesaid place, under the same tenement with the aforesaid Messrs. Newbury and Co. Norfolk-street, Strand—the identical Mister WAKELY, in fact, who received a severe *stab* from *some Ruthless* hand, the night his house was *set* on fire ! ! ! !

Although, Gentlemen, I cannot, at the present moment, exactly refer your readers to the precise date of these disastrous circumstances, yet, I pledge myself, on some future and not very distant oc-

casion, to give the history of them in full detail, for the satisfaction of the medical world, whose curiosity must naturally have been excited at the preceding *mysterious* assertion, which very much reminds me of the fable of the ASS cramming its head into a bush; thence arguing, that, because *Neddy* saw nothing himself, he was seen by no one. But MISTER WAKELY is not the first phœnix we have heard of that has been *regenerated in its own ashes.* Let us hope, however, that the "*dog* will not return to his vomit.!" To be brief, the *conductors* of the L—nc—t are now known—the lion's skin is now doff'd, and the calf's now substituted; and, let *Mister* WAKELY, who has lately begun to out-ape pedantry itself, by quoting *dog Latin*, writing bad French, and worse English, remember that "*la charité bien ordonné commence chez soi.*"* Again, if *Mister* Wakely, of Norfolk-street, in the Strand, (the *conductors* of the ———) has not already *burnt* his fingers by making too free with his *combustibles*, we would recommend him, now he is rendered both visible and tangible, to constrain those sudden *sparks* of *wit*, those hasty *flashes* of *humour*, which, not with him alone, have set both chairs, tables, and houses in an *uproar*, before the *extinguisher* could counteract the *blaze* of destruction.

Gentlemen—If the aforesaid *Mister* WAKELY, who, by the bye, is neither surgeon nor sailor, says, that he is not the "*conductors*" of the L—nc—t, I am ready to prove that he is; and, what is more, you are welcome, if you choose, should *Mister* WAKELY himself apply for it, in *propria forma atque persona*, to give him my address; strictly, however, enjoining him, should he be disposed to call visibly upon me, to be so kind as to leave his *Lancet* and *Tinder-box* at home.

If you insert this, gentlemen, in your columns, I promise, in return for the attention, to keep a bright eye upon *Mister* W——— and to let you hear from me again, in a very short time.*

Yours, &c. "PEEPING TOM."

Tottenham, Jan. 12.

* "Those who keep glass-houses should never throw stones;" *vulgo*, "charity begins at home."

PHRENOLOGICAL OBSERVATIONS, *&c. on the Head of* THURTELL.

(Continued from page 32.)

It is with some reluctance we return to this subject; but, as a stupid, nonsensical, and contradictory article, from the pen of a Dr. Burnet, M. D., has been copied into a number of newspapers, we cannot suffer the imposition to pass without offering a refutation to some of the absurdities contained in it. In the first place, we are convinced that no physician, deputed by the Phrenological Society, could have drawn any other inference than such as are compatible with the doctrine of organology; and, secondly, to be enabled to do so, the physician in question should have been an accredited as well as a qualified person; in this case, his name would have been coupled with that of his learned friend—but, as arguments were wanting as well as proofs, it was quite enough for the purpose of a catchpenny publication, to make assertions which it would never be called upon to substantiate. So much for Dr. Burnet and his phrenological physician, if, actually, there

* We have, from time to time, received a variety of rather odd communications from this self-said "PEEPING-TOM," of Tottenham; who appears, by the bye, to be an active prying sort of a character: but who the *Mister* WAKELY may be, forsooth, to whom Tom alludes, we are as ignorant hitherto as the man in the Moon.—Perhaps Tom is playing off a hoax upon us. *N'importe. Ed.*

does exist one, as described, beyond the fumes of the doctor's warm and moist imagination.

Admitting, then, that Thurtell's head exhibited the organs of BENEVOLENCE, FIRMNESS, COURAGE, IDEALITY, DESTRUCTIVENESS; the preponderance of the higher sentiments over the last, which does not require an enormous developement, in no manner does away with the propensity assigned to it; for, as GALL observes, *L'on ne doit pas s'attendre à trouver chez tout les meurtriers un grand developement de l'organe carnassier.*

"There are unfortunate circumstances," observes the same author, "where an organ even moderately developed, may receive such incitement as to acquire a high degree of activity."

There are, consequently, many circumstances that may bring an organ, apparently under the influence of those of a superior order, into action—the organs, distinctly, may also be diseased, from a variety of exciting causes; and, doubtless, it is under this influence that each may receive an extraordinary accumulation of energy. Neither should it be forgotten, that the same degree of activity in one organ, must always produce actions entirely different with different individuals. Dr. Gall observes, that—

"If we make an exception in cases of idiotism and mania, or of an entirely circumscribed incitement, the actions are never determined by the activity of a single organ. The manifestation of a certain force will be different, according as the action of the other organs is more or less strong, or differently modified."

These, with various other reasons, are sufficient to shew that we are not always to look for a large developement of the organ of destructiveness in every individual who may have been led away, from various motives, to commit a murder; and who might not have been disposed to it by his primitive organization. "It is also for this reason," says Dr. Gall, "that I am far from considering a person disposed to commit a murder, because I find the organ of this instinct very much developed in him."

All then that can be safely said on this subject is, that external circumstances being equal, an individual, in whom the organ of destructiveness is strongly marked, will commit a murder with more facility than another, whom nature has not disposed to such an act, by his organization. Amid the tumult of violent passions, transported with jealousy, rage, vengeance, &c. the idea of revenge will sooner present itself to the first than to the latter; whose ideas, on the contrary, will tend to take a different direction.

On this subject there might be no end to digression. But that the murder of Weare was premeditated no one now can doubt; and by whom might it first have been suggested? Perhaps not by the individual who actually committed it. Let us suppose, then, that the horrid and revolting deed was first proposed by Hunt, who, it is understood, has the organ of courage very indifferently, if at all developed; but in whom that of destructiveness may still not be larger than in Thurtell, whose organs of courage, on the contrary, is recognised. The first then planned and abetted, but from the want of courage, left the deed to Thurtell, who was more courageous than himself.

Some have asserted, though without the least foundation, that Thurtell has the organ of cautiousness equally developed with the other organ. This, however, is not the case; and the absence of fear manifested by him, which is so familiar to those in whom this organ is present, may tend to confirm this observation. The faculty, in question, as already observed, produces doubts,

hesitation, caution, circumspection, or timidity and fear, in the degree in which it is possessed, and the other faculties with which it is combined. It is, moreover, an essential ingredient in a prudent character —a distinction to which we are not told Thurtell was ever entitled.

With respect to the presence of the other organs found developed in Thurtell's head, that of benevolence is certainly apparent; and this he confirmed before his execution, by the readiness and warmth with which he forgave Hunt, who had betrayed him; in fact, who was the means of hastening his untimely end. Ideality may be inferred from his enthusiasm of gaming and pugilism, and his attempts at oratory—but it was not combined with caution; therefore, both the serious and the sublime were wanting. Combativeness is admitted, and in somewhat a stronger degree than destructiveness; and it is generally found large in persons who have murdered from the impulse of the moment—and, as destructiveness, however large or small, leads only to crime when too energetic, the union of the two may exert a reciprocal influence over each other, carrying either the one or the *other* to the *ne plus ultra* of activity—(murder) sooner than if only one of them were developed. For Gall remarks that, in proportion as a strong activity of the organ of the instinct to murder co-exists with one or several other qualities or faculties of equal activity, the action of this organ must necessarily be modified in a different manner. Co-existing with the love of fights or battles, it constitutes intrepidity even to temerity, &c. United with a high degree of lasciviousness, it leads to every species of blood-thirsty debauchery, &c. &c.

The busts and portraits of Caligula, Nero, Sylla the dictator; Septimus Severus, the most cruel and warlike of the Roman emperors; Charles the IXth. Richard Cœur de Lion, Philip the IId. of Spain, *bloody* Queen Mary the Ist. Catherine de Medicis, Ravillac; the famous pirate Storzenbecker, Archbishop Bonnet, &c. all bear the external mark of a cruel and sanguinary character. In fact, it is proved, by the natural history of men and animals, not only as regards man in a state of health, but also in a state of disease, that the murderous or carnivorous instinct, or in the more refined language of Spurtzheim, of destructiveness, is an innate primitive power, consequently a fundamental quality resulting from a particular cerebral developement, placed directly above the ears of the greater number of carnivorous and omnivorous animals; subject, however, to modification and variety, in proportion as it may be influenced either by the superior intellectual faculties or the animal qualities, &c.

We shall conclude this article, for the present, by recommending Dr. Alexander Burnet, M.D. and his Phrenological friend, to examine the doctrine a little closer before they pronounce upon its merits or defects—and, if these gentlemen should take a *cup* of prejudice too much on their way, or if they have drawn too hasty conclusions from their first visit to THURTELL'S HEAD, we would advise them to return more *soberly*, and then tell the world over again all they know about it. F.

PROCEEDINGS OF

PHILOSOPHICAL SOCIETIES.

(Continued from page 14.)

The *winter birds of passage* leave this country for precisely the same reason that impels the *spring migrators* to come hither; some of them, as the wild-duck and the wood-pigeon, which occasionally build

here, are irregular in their migration; the most regular are the red-wing and the field-fare, of whose building in this country Dr. Jenner never met with an instance. The food of the former, he observes, is not haws, or the fruit of the white thorn, as has been stated, but worms and insects, which they gather from the ground, feeding in flocks; Dr. J. had seen them dying of famine when haws were abundant. A gentleman saw a flock of field-fares on the day before the thawing of the great frost of 1794, and they seemed as wild and vigorous as if in season; he shot one which Dr. Jenner examined, and found to be in excellent condition, but there was no food in the stomach, and the last which the animal had eaten was digested: now as the ground was covered with snow, and as the long frost had destroyed every thing they could feed on, these field-fares must have returned here for a short time, in consequence of the inclemency of the weather abroad. Red-wings and field-fares always leave this country when they are in the best condition. The approach of severe frost is indicated by the arrival of water-birds, as that of thaw is by the coming of the spring migrators. Birds often outstrip in their migrations the progress of the frost itself.

Dr. Jenner considers that Dr. Darwin must be mistaken in what he says respecting cuckoos seen feeding their young. The birds in question must have been goat-suckers, which are very easily confounded with cuckoos by those who are not fully conversant with the characters of their plumage, &c.

This very interesting paper concludes with a recapitulation of the principal facts contained in it, and of the author's views respecting them.

Calcutta Medical and Physical Society.

The objects of this recently established Society, is the advancement of professional knowledge, for the mutual benefit of the members, more particularly with reference to Indian diseases and treatment; and the promoting, by every means in their power, the study of such branches of natural history as are connected with the practice of medicine, or lead to medical research. The Society is open to all other medical men, of whatever denomination or country.

Among a variety of other resolutions agreed to, it was further resolved, that, Drs. Hare, Mellis, and Adam, be nominated President, Vice-President, and Secretary to the Society. The next meeting of the Society will be held on Saturday the 15th of March.

The Society invites communications generally on the following topics:—

1st, Meteorology and medical topography of the various districts of India, and the peculiarities of the inhabitants of each, with reference to their physical configuration.

2d, The diseases of the country, as they affect both Europeans and natives, with their treatment, adhering closely to ascertained facts, and deriving them, if possible, from local and personal experience.

3d, The diseases peculiar to natives, and the mode of treatment followed by native practitioners, together with the received opinions as to their nature and causes.

4th, Description of surgical instruments, and the mode of operating among the natives.

5th, The materia medica of Hindostan, whether animals, vegetable, or mineral productions of the country, or artificial compounds, employed in native practice, with their chemical analysis.

6th, The history of medical science, in general, in the east, both in its past and present condition.

7th, Descriptions of plants unknown to the botany of Europe, either with or without reference to their medical virtues.

8th, Descriptions of animals, either unknown to, or but imperfectly described by, European zoologists.

9th, Account of diseases affecting the lower animals, as the horse, camel, and others, more particularly valuable from their services to man.

10th, Dissections of all the varieties of animals, with their peculiarities of structure, and whatever is comprehended under the term of comparative anatomy.

The little progress hitherto made towards the history of diseases peculiar to this climate, or of the modifications of those known in other parts of the world, must render this society a desideratum of considerable importance to the medical world, both at home and abroad; and, although the difficulties in the way of improvement, which are every where considerable, be exceedingly augmented in this hemisphere, (India)

from the want of books, and the great distance from each other, at which medical men are placed, they surely cannot be insurmountable. In the extensive and so varied a field as this vast empire, stimulated by every inducement that can render this profession honourable to ourselves, or beneficial to mankind, the interchange of knowledge and opinion here proposed requires only cordiality, to make us agreeable and delightful to individuals, as profitable to the community.

HOSPITAL REPORTS.

GUY'S HOSPITAL. *Jan.* 16.—*Amputation at the Hip-joint.*—This Herculean operation, which was only noticed in our preceding number, in consequence of its unexpected occurrence, left us no time to lay an account of it before our readers. This week, however, we not only give the details of the case, but of a similar and successful one performed, a short time back, at Edinburgh. (See page 33).

If we are correctly informed, it is also the first operation of the kind performed at this hospital. The patient, in the present instance, is upwards of 40 years of age, who, some years ago, had been amputated above the knee; since which time the thigh-bone had become the seat of extensive disease, from the end of the stump as far up as the trochanter major, and had so excessively debilitated his constitution, that he was evidently sinking under its influence.

At a quarter past one, the patient, by his own consent, was carried into the operating theatre, and placed on the table, in the horizontal posture. The operator (Sir A. Cooper), having also taken up his position, and the femoral artery being regularly and firmly compressed by Mr. Key, the operation was commenced, by making an incision through the skin and cellular membrane, just below Poupart's ligament, a little to the iliac side of the arteria femoralis, which (the incision) was continued downwards and outwards, to the back part of the thigh, about one third of the way down. The point of the knife was now carried in the opposite direction, obliquely upwards and inwards, to meet the origin of the first incision; which, being effected, formed somewhat of an elliptical curve. After a short pause, the femoral artery was divided, and a ligature without much difficulty applied. The catlin was now carried in the direction of the first incision, and the muscles divided. It was here found necessary to take up the arterea profunda. Having waited a short time to see whether there were any bleeding vessels, the circumflex was included in a ligature, with another small vessel. The operation was then continued and completed by the removal of the head of the femur from the acetabulum, in as safe and as dexterous a manner as it was possible to conceive. Four ligatures were all that were applied. The integuments were brought in contact, and the upper part held there by means of a single stitch—adhesive strapping confined the remaining part—over which, and round the loins, a roller was applied. The hæmorrhage was comparatively of a trifling nature—and the blood lost had a venous appearance. The operation, as far as we were enabled to judge, did not occupy half-an-hour. The patient, who bore the operation with extraordinary fortitude, became frequently so faint and so much exhausted, that it was necessary to supply him with a considerable portion of wine; brandy was also ordered to be given him, but refused; and the wine itself, with difficulty, after the first or second time, would be taken. The man was removed to the ward in good spirits, having previously thanked Sir A., in the most grateful manner, for the attention paid him during the operation; remarking, at the same time, that it was "the hardest day's work he had ever gone through;" to which Sir Astley replied, "perhaps it might, but that it was not the hardest he had ever had."

Jan. 23.—Friday, Two o'clock.—Up to this hour, (when we last saw the patient) the case is doing extremely well—not the least untoward occurrence having interfered. The stump is granulating fast, and the adhesive process is indicated about the flap. An opiate at night is all that is ordered, with attention, at the same time, to the state of the bowels, which are in a regular and comfortable condition. Since the operation, the ward has been kept very tranquil, with the outer door shut; in order to exclude every kind of interruption to this desirable object.

Mr. MORGAN, the new-elected surgeon, in the room of Mr. LUCAS (retired from bad health) performed his maiden operation here this day, by removing a large steatomatous tumour from the breast of a woman: also one of the melicerous kind from the inner edge of the fore-arm of another female; and cut out a carcinomatous little lump from the lower lip of a lively-looking old man.

From the above specimens, however unimportant they may be, we are inclined to augur favourably of Mr. Morgan as an operator. He goes to work with coolness,

an indispensible requisite in an operating surgeon, and handles the knife with considerable address.

Mr. Morgan was duly initiated by the blood, from the first artery he divided, having spirted directly on his face, giving the countenance a singularly cribriform appearance, to the no small *jollification* of the theatre, which was crowded to excess.

MELANGE.

Mineralogy and Geology.—The loss which the Academy sustained in the death of M. Hauy, occasioned an apprehension that the public might be deprived of the new edition of the work of that illustrious professor, on the science which he cultivated with so much success. Happily the whole of the manuscript was prepared. Five volumes have already appeared, and the impression of the sixth and last is going on, under the superintendence of M. De Lafosse, one of M. Hauy's most distinguished pupils.—M. Constant Prevost has been investigating, mineralogically, the bold rocky shore of Picardy and Normandy, from Calais to Cherburg.—*Acad. des Sciences.*

Cole's Patent Trusses.—I hereby certify that I have suffered twice the dangers of strangulated hernia, which had almost proved fatal. I placed myself under the care of an eminent surgeon, in this neighbourhood, from whom I learned that Mr. Coles, London Bridge, had given proofs of extraordinary talents in his profession; a truss was procured, which effected a pressure of at least sixteen pounds upon the hernia, which was not removed from the part for fourteen days and nights. He has since applied a bandage, which I have wore for a much longer period without removing it. It is with great satisfaction that I can inform those who may be similarly circumstanced, that I have not suffered a shadow of pain since I have been under his care.*

John Martin, Licensed Victualler.
Dover Castle Inn, Deptford.

I hereby certify that I have worn the trusses of Mr. Coles's invention for sixteen months past, and have found them more easy and more efficacious than any others which I had worn for fourteen years previously.

Carver Vickery, Surgeon, R. N.
London, Sep. 20, 1823.

Vegetable Physics, and Botany.—M. Dutrochet has made some new and exceedingly curious experiments on the direction which the different parts of plants take, when in motion, from the instant of germination to their developement.—It is generally imagined that a tree, deprived of its bark, loses its vegetative faculty. M. Dupetit Thouars has peeled trees for three successive years, and they have sustained no injury. He thinks the elm endures this mutilation best; the oak cannot bear it.—M. Raffenau Delille has described a singular plant of the family of gourds. Its fruit, which is nearly two feet long, and of a proportionate thickness, is covered with a resinous and inflammable powder, that can be scraped off; and seems analogous to the vegetable wax of the *myrica cerifera* of North America, and of the *ceroxylum andicola* in the Cordilleras.—Several numbers of splendid botanical works, by M. de Humboldt and M. Kunth, have appeared.—*Acad. des Sciences.*

* If a patient wishes to ascertain the pressure of a truss, let him find the diameter of his body, which, (in a middle size man, is about eight inches). Hold the truss in your hand, and suspend to the pad as many pounds weight as will open it eight inches, which will give you the exact pressure.

BIRTH.—On the 4th inst. the lady of Dr. O'Brien, of Navan, of a son.

On the 17th inst. in the Lambeth-road, the lady of Mr. W. T. Iliff, Surgeon, of a son.

MARRIED.—On the 2d. ult. at St. Michael's, by his Britannic Majesty's Consul-general of the Azores, Dr. Sanderson Walker, F. R. C. P. to Emma Henrietta, third daughter to Captain G. Poplewell, of Sister's-cottage, Stoke Newington.

On the 15th inst. in Cornwall, John Henry Walker, Esq. Surgeon, Strand, to Mary Lyne, only daughter of the late Captain P. Lyne of Torfrey.

ADVERTISEMENT.

Just published, price 6d. pp. 48.

The RELIGIOUS USE OF BOTANY, being an Introduction to the Science. By R. J. Thornton, M. D.

Printed for J. Paul, 42, Holland-street, Southwark; sold by Sherwood, Neely, and Jones, and by all Booksellers.

TO CORRESPONDENTS.

Some alterations and changes are about to take place in the future management of this Magazine, which will be announced in the ensuing number: in consequence of which the paper received from Mr. S. will be withheld until the final arrangements are made. Also the valuable communications from L. D. and others.

London:

Printed by W. LEWIS, 21, *Finch-lane:*
For the PROPRIETORS; and sold also by Sherwood, Neely, and Jones, Paternoster-Row; Simpkin and Marshall, Stationers'-Court; John Cox, Berner's-street, Oxford Street; J. Shaw, Fetter-lane, Fleet-street; Callow and Wilson, Gerrard-Street, Soho; W. Stewart, South Bridge-Street, Edinburgh; J. Cameron, opposite the College, Glasgow; Hodges and M'Arthur, Dublin, &c. &c.

THE WEEKLY

Medico-Chirurgical Review & Philosophical MAGAZINE.

No. LII.] SATURDAY, JANUARY 31, 1824. [*Price* 4*d.*

"FLORIFERIS, UT APES, IN SALTIBUS OMNIA LIBANT
OMNIA NOS, ITIDEM, DEPASCIMUR AUREA DICTA."

On a new Phenomenon of Electro-magnetism. By Sir HUMPHREY DAVY, *Bart. Pres. RS.**

On a subject so obscure as electromagnetism, and connected by analogies more or less distinct with the doctrines of heat, light, electricity, and chemical attraction, it is not difficult to frame *hypotheses;* but the science is in a state too near its infancy to expect the developement of any satisfactory *theory;* and its progress can only be ensured by new facts and experiments, which may prepare the way for extensive and general reasonings upon its principles. Influenced by this opinion, I am induced to lay before the Society an account of the electromagnetic phenomenon I observed about fifteen months ago in the laboratory of the Royal Institution, and which I have lately had an occasion of witnessing in a more perfect manner, through the kindness of Mr. Pepys, by the use of a large battery, constructed under his directions for the London Institution, and containing a pair of plates of about 200 square feet. In describing this phenomenon, I shall not enter into very minute details, because the experiments, which led to the discovery of it, are very simple, and, though more distinct with a large apparatus, yet it may be observed by the use of a pair of plates containing from 10 to 15 square feet.

Immediately after Mr. Faraday had published his ingenious experiments on electromagnetic rotation, I was induced to try the action of a magnet on mercury connected in the electrical circuit, hoping that, in this case, as there was no mechanical suspension of the conductor, the appearances would be exhibited in their most simple form; and I found that when two wires were placed in a basin of mercury perpendicular to the surface, and in the voltaic circuit of a battery with large plates; and the pole of a powerful magnet held either above or below the wires, the mercury immediately began to revolve round the wire as an axis, according to the common circumstances of electromagnetic rotation, and with a velocity exceedingly increased when the *opposite* poles of two magnets were used, one above, the other below.

Masses of mercury, of several inches in diameter were set in motion, and made to revolve in this manner, whenever the pole of the magnet was held near the perpendicular of the wire; but when the pole was held above the mercury between the two wires, the circular motion ceased; and currents took place in the mercury in opposite directions, one to the right and the other to the left of the magnet. These circumstances, and various others which it would be tedious to detail, induced me to believe that the passage of the electricity through the mercury produced motions independent of the action of the magnet; and that the

* From the Philosophical Transactions for 1823, Part II.

appearances which I have described were owing to a composition of forces.

I endeavoured to ascertain the existence of these motions in the mercury, by covering its surface with weak acids; and diffusing over it finely divided matter, such as the seeds of lycopodium, white oxide of mercury, &c. but without any distinct result. It then occurred to me, that from the position of the wires, currents, if they existed, must occur chiefly in the lower, and not the upper surface of the mercury; and I consequently inverted the form of the experiment. I had two copper wires, of about one-sixth of an inch in diameter, the extremities of which were flat and carefully polished, passed through two holes three inches apart in the bottom of a glass basin, and perpendicular to it; they were cemented into the basin, and made non-conductors by sealing-wax, except at their polished ends; the basin was then filled with mercury, which stood about a tenth or twelfth of an inch above the wires. The wires were now placed in a powerful voltaic circuit. The moment the contacts were made, *the phenomenon*, which is the principal object of this paper, occurred: the mercury was immediately seen in violent agitation; its surface became elevated into a small cone above each of the wires; waves flowed off in all directions from these cones; and the only point of rest was apparently where they met in the centre of the mercury between the two wires. On holding the pole of a powerful bar magnet at a considerable distance (some inches) above one of the cones, its apex was diminished and its base extended: by lowering the pole further, these effects were still further increased, and the undulations were feebler. At a smaller distance the surface of the mercury became plane; and rotation slowly began round the wire. As the magnet approached, the rotation became more rapid, and when it was about half an inch above the mercury, a great depression of it was observed above the wire, and a vortex, which reached almost to the surface of the wire.

In the first experiments which I made, the conical elevations or fountains of mercury were about the tenth or twelfth of an inch high, and the vortices apparently as low; but in the experiments made at the London Institution, the mercury being much higher above the wire, the elevations and depressions were much more considerable, amounting to the fifth or sixth of an inch. Of course the rotation took place with either pole of a magnet or either wire, or both together, according to the well-known circumstances which determine these effects.

To ascertain whether the communication of heat, diminishing the specific gravity of the mercury, had any share in these phenomena, I placed a delicate thermometer above one of the wires in the mercury, but there was no immediate elevation of temperature; the heat of the mercury gradually increased, as did that of the wires; but this increase was similar in every part of the circuit. I proved the same thing more distinctly, by making the whole apparatus a *thermometer*, terminating in a fine tube filled with mercury. At the first instant that the mercury became electromagnetic, there was no increase of its volume.

This phenomenon cannot be attributed to common electrical repulsion, for in the electromagnetic circuit, similar electrified conductors do not repel, but attract each other; and it is in the case in which conductors in

opposite states are brought near each other on surfaces of mercury, that repulsion takes place.

Nor can the effect be referred to that kind of action which occurs when electricity passes from good into bad conductors, as in the phenomena of points electrified in air, as the following facts seem to prove. Steel wires were substituted for copper wires, and the appearances were the same in kind, and only less in degree; without doubt, in consequence of a smaller quantity of electricity passing through the steel wires: and by comparing the conducting powers of equal cylinders of mercury and steel in glass tubes, by ascertaining the quantity of iron filings they attracted, it was found that the conducting powers of mercury were higher than those of steel; the first metal taking up fifty-eight grains of iron filings, and the second only thirty-seven.

Again: fused tin was substituted for mercury in a porcelain vessel into which wires of copper and steel were alternately ground and fixed: the elevations were produced as in the mercury, and the phenomena of rotation by the magnet; and it was found by direct experiment, that the conducting powers of the tin, at and just before its point of fusion, did not perceptibly differ, and that they were much higher than those of mercury. Lastly, the communication was made from the battery by two tubes having nearly the same diameter as the wires filled with mercury, so that the electricity, for some inches before it entered the basin, passed through mercury; and still the appearances continued the same.

From the rapidity of the undulations round the points of the cones, I thought they would put in motion any light bodies placed above the mercury; but I could not produce the slightest motion in a very light wheel hung on an axle; and when fine powders of any kind were strewed upon the surface, they merely underwent undulations, without any other change of place; and fine iron filings strewed on the top of the cone, arranged themselves in right lines at right angles to the line joining the two wires, and remained stationary, even on the centre of the cone. The effect, therefore, is of a novel kind, and in one respect seems analogous to that of the tides. It would appear as if the passage of the electricity diminished the action of gravity on the mercury. And that there is no change of volume of the whole mass of the mercury appears from the experiment, p. 24; and this was shown likewise by inclosing the apparatus in a kind of manometer, terminating in a fine tube containing air inclosed by oil; and which, by its expansion or contraction, would have shown the slightest change of volume in the mercury: none, however, took place when the contacts were alternately made and broken, unless the circuit was uninterrupted for a sufficient time to communicate sensible heat to the mercury.

This phenomenon, in which the same effects are produced at the two opposite poles, seems strongly opposed to the idea of the electromagnetic results being produced by the transition currents or motions of a single imponderable fluid.

On the conjectural part of the subject I shall not however enter, for the reasons stated in the beginning of this paper; but I cannot with propriety conclude, without mentioning a circumstance in the history of the progress of electromagnetism, which, though well known to many Fellows of this Society, has, I believe, never been made public, namely, that we owe to the sagacity of Dr. Wollaston, the first idea of the possibility of the rotations of the

electromagnetic wire round its axis, by the approach of a magnet; and I witnessed, early in 1821, an unsuccessful experiment which he made to produce the effect in the laboratory of the Royal Institution.

Case of severe Inflammatory Disease.

By CHARLES LAW, *Esq. Surgeon.*

[*Communicated through Dr.* BIRKBECK.]

On the 23d of last month (October), I was requested to see Maria B., aged 20, of a delicate habit, having been considerably reduced by a most severe inflammatory attack which she had experienced in April last. I found her complaining of great pain in the left hypochondrium, constant, and increased by pressure and full inspiration; bowels costive; mouth dry; tongue slightly coated; pulse not more frequent than usual, but rather more thrilling when pressed; skin below the ordinary warmth rather than above it, and without perspiration. I bled her to ℥xx. when she fainted, and ordered her to take, every four hours, ℥jss. of strong infusion of senna, with manna and Epsom salts, and at bed-time eight grains of the pulv. antimonialis.

On the 24th, she had passed several offensive and dark-coloured stools, and had slight vomiting: the pain was still severe; the blood was but slightly buffed. I again bled her to fainting, but obtained only ℥x. I directed 12 leeches to be applied to the seat of the pain, and the medicine to be continued as before.

On the 25th, the pain had left her, or nearly so; the bowels continued open, and the skin was moist. During the night she had vomited a clear fluid of a greenish hue, which came off the stomach without difficulty. She was now ordered ℈j. of carbonate of potass in a little cinnamon-water every six hours.

26th.—Continued easy, with the exception of a slight pain in the chest. The alkaline repeated, and aperient mixture occasionally.

27th. The pain in the chest had now become severe, and I ordered her eight leeches, five only of which were applied.

28th.—Pain in the chest much increased, and breathing difficult. I bled her freely till she fainted, and gave her the following draught:—

℞ Potass. Nitrat. gr. viij.
Liq. Antim. Tart. ♏xxx.
Syr. Croci. ℥ ss.
Mistur. Camphor. ℥ jss. M.
Ft. haustus, sextâ quâque horâ sumendus.

29th.—Much relieved, though still in pain upon a full inspiration. Continue the draught and aperient occasionally.

30th.—Much better, as far as the chest was concerned; but suffering from a most acute pain in the head, which would not allow of a moment's rest. I recommended her to allow her hair to be cut off all the hinder part of the head, leaving only two or three of the foremost ringlets; I likewise ordered 16 leeches about the forehead and temples. Medicine as before.

31st.—Head much relieved, and in hopes of a speedy recovery; but, at the same time, complaining of pain and heat in making water.

November 1st.—Head easy; heat of urine continuing, and a severe pain felt in the region of the kidneys. Ordered her to drink freely of barley-water, with gum arabic, to keep her bowels open, with the cathartic mixture, and every six hours to take the following:—

℞ Ol. Amygdal. ♏xl.
Mannæ Opt. ℥j.
Liq. Potass. ♏xv.
Aq. Pimentæ, ℥j. M.
Ft. haustus.

2d.—On going up stairs, I heard her groaning piteously, from the continuance of the pain in the loins, which was very severe. I again bled her as freely as I could, fainting occurring after she had lost about 16 ounces of blood. I ordered the draught to be continued, with the addition of 25 minims of tinct. hyoscyami.

3d.—She expressed herself easier in the lumbar region, but said her thighs were in great pain, and very tender when she moved or made an attempt to sit to take any thing.

4th.—Thighs very painful; back easier. Objecting to the oily draught, I substituted the following:—

℞ Sodæ Subcarbon. ℈j.
Tinct. Hyoscyam. ♏xxv.
Syr. Papaver. ʒj.
Aq. Cinnam. ʒx. M. ft. haustus.

I requested the application of a few leeches to any part of the thigh or thighs she might find most painful, and the use of warm fomentations afterwards.

5th.—Seven leeches had been applied to one thigh, which had bled freely, and to-day both thighs were less painful. Continue draught and fomentations.

6th.—Much better in every respect. Complained of occasional pains in the feet and legs. Add to each draught, tinct. colchici, ♏xl. To use the foot-bath three or four times a-day, and afterwards envelope the legs in flannel.

From this time she recovered rapidly, so as to be enabled to sit up in a few days.

The above case may, I think, prove serviceable, by pointing out the propriety of following up inflammatory disease through all its shiftings and turnings, and with so sturdy an enemy, waging nothing short of a warfare of extermination. *(Med. Repos.)*

City Terrace, City Road,
Nov. 18, 1823.

On Lupulin, as a Medicine. By Nicholas Mill, *Esq.* [*From the Annals of Philosophy.*]

"Sir,—Having noticed in an American journal the experiments of Dr. Ives, at New York, on the annon hop, and which appeared to me of considerable importance in medicine, I was induced to extend those inquiries, and apply the result, if beneficial, to practice among my own particular friends.

"Preparations of the hop have been occasionally used in medicine in this country. The whole of the plant has usually been employed to form a tincture, but from the extraneous matter introduced by this means, it has doubtless rendered this medicine inert, if not prejudicial. Dr. Ives discovered that the true aromatic bitter of the hop resided solely in a pulverulent matter, which he called lupulin, for the collection, preparation, and administration of which I am about to give specific directions.

"Take any quantity of the best hops, and rub them strongly between the hands, or put them in a bag, and beat them for some time; when the beating is completed, throw them on a coarse wire sieve, which will only suffer the dust, &c. to pass it; let them be well rubbed on the sieve till every thing has gone through, except the leaves and stems of the plant; reject the leaves and stems altogether, and sift what has already passed the wire through a lawn sieve; nothing will now pass but a very fine powder, resembling red sand: this is the lupulin in which the whole virtue of the hop resides.

"The preparations of this substance, which I have found to be most efficacious, are the decoction and tincture.

"The decoction may be made by putting a sufficient quantity of lupu-

lin into a Florence flask, in a sand heat, and filling it three parts full with distilled water; boil the whole for half-an-hour, and strain through cotton cloth. The solution thus obtained will be feculent, and does not become clear by repose; add, therefore, while hot, a small quantity of solution of gelatine in hot water; shake the whole together, and let it remain till cold, then filter through paper, and a clear yellow liquid will be obtained. It is intensely, but not unpleasantly bitter; and, when administered in doses of a tea-spoonful at a time in a table-spoonful of cold water, is a true stomachic. It is tonic, narcotic, and aromatic. It does not produce constipation of the bowels as almost all other tonics do. It appears to act entirely on the nervous system, and may be prescribed with manifest advantage in all cases of debility and inaction of the digestive organs, where powerful tonics would be injurious.

"The tincture may be prepared by digesting the lupulin in *strong and warm alcohol*, till saturated, when it must be filtered through paper, and a deep-red solution will be obtained.

"From 40 to 60 minims of this tincture act as an anodyne, and have a powerful effect in allaying great nervous irritation; and that stupidity which often accompanies the use of opium, is never induced by this medicine.

"I am, Sir, your obedient servant,

"NICHOLAS MILL."

Bridge Cottage, Camberwell, Nov. 20.

Treatment of Lacerated Perineum.—By Dr. CAMPBELL, *of Edinburgh.*

In this injury "Two modes of treatment have been recommended —first, to bring the lacerated surfaces into apposition, merely by securing the limbs together; and, secondly, to place two or three stitches in the perineum, and secure the limbs. A practitioner, who is at all acquainted with the changes which the external parts undergo, owing to their enormous distention during the expulsion of the fœtus, would scarcly think of recommending the perineum to be stitched; for the great relaxation consequent on such distention, should present to him a prospect of the parts cohering by merely bringing them into contact, without adding to the sufferings of the patient by an unnecessary operation, and wounding her feelings by an indelicate exposure. From the result of several cases, I am justified in saying, that, in recent accidents of this kind, sutures are not required. The removal of the urine and fæces are points which require particular care and management. The former should be drawn off by the catheter at regular intervals, and the latter removed, by some contrivance which will not require much exertion on the part of the patient. With regard to the state of the bowels, it was at one time the opinion of some, that it would be advisable to induce constipation, in order to prevent the patient from being obliged to exert herself; but experience proved the absurdity of this notion, because the efforts required for the expulsion of indurated fæces were found to derange the process of adhesion, and prevent reunion. On these grounds, therefore, our practice will be much more successful by keeping the bowels, if any thing, rather open; but by no means to occasion an actual purging, for fear of producing too much action and irritation of the parts which are the seat of injury. I have found, that in the cases under consideration, the free use of the subacid fruits will keep the bowels in a proper state. When

laxatives are required, they should be exhibited in limited doses. To favour the approximation of the parts, the patient should be recommended to lie as much as possible on her side in bed.

"In chronic examples, on the other hand, of which I have had little experience, I do not think that stitches can be always dispensed with, however painful and indelicate the practice may be to the patient. With one exception, however, I have always succeeded in causing a reunion, by securing the limbs above the knees, by means of a common roller; keeping the wound clean, by changing the cloths applied to the external parts sufficiently often; ablutions daily, with an astringent lotion in a tepid state, such as formerly recommended; and placing a piece of dry lint over the wound after each ablution.

"In chronic cases, where an attempt is made to obtain a reunion of the divided parts, the callous margins must be pared, or rendered raw by the application of caustic; and as they have had time to contract or recover their tone, some expedient must be resorted to, in order to bring them together, on which account I consider the use of sutures indispensable. An operation similar to that performed in cases of hare-lip has also been advised in the injuries embraced by the present remarks; and the ingenious Smellie put it to the test of experiment in one instance, but without success. I still think, however, that this expedient merits further trial: for the failure of a solitary instance does not justify us in rejecting the practice altogether." *(Edinr. Med. and Surg. Jour.)*

Dr. CHISHOLM'S *Case of obstinate Obstruction of the Bowels.*

"I was desired, by my friend Mr. Beet, surgeon, at Ashford, to meet him at the house of Mr. B., distant about four miles from Ashford, on the 28th of August, 1822, late at night. I found the case to be obstruction in the bowels. The usual means were resorted to with considerable energy, viz. blood-letting, warm baths, purgatives, enemata, &c. &c. but without affording relief. On the 29th, the obstruction still continued, and the above plan, to its fullest extent, was again tried, but without effect. On the 30th, I found, on visiting Mr. B., that the extremities were cold, and that stercoraceous vomiting had come on. As I had considered the case from the beginning to be one of *introsusceptio*, I desired that a strong solution of the common yellow soap should be prepared; of this tepid solution *more than a large wash-hand basinful* was gradually, but perseveringly thrown up, by means of *Read's ejecting machine*, and retained, by applying napkins to the anus, as long as the patient could bear the distention, which resembled that of ascites or nymphanites. When the latter part of the injection came away, we had the gratification to find it tinged and mixed with stool. The patient shortly after passed wind and a motion; all the bad symptoms vanished, and he was well in three days. I have had many other cases where Read's machine was of infinite service, and I think every medical practitioner should have one in his possession."

Canterbury, 22d November, 1823.

HEADS *of* SURGICAL LECTURES, *delivered by* SIR A. COOPER, Bart., *at* ST. THOMAS'S HOSPITAL.

(Hydrocele concluded from page 42.)

"While the injection remains in the tunica vaginalis, the patient will complain of a good deal of pain; he will at first feel as if the testicle was squeezed; then he will feel the pain

running along the spermatic cord—at the spinous process of the ilium, and at the loins where the spermatic plexus of nerves arises, and lastly at the neck of the bladder in the course of the vas deferens. The pain will be greater or less in proportion as the patient is more or less irritable. It is to be observed, however, that the degree of subsequent inflammation is generally in the inverse ratio of the pain suffered at the time of the injection. When there is no pain there will generally be a considerable degree of inflammation; on the contrary, when much pain is felt, it is generally the effect of nervous irritability, and little inflammation follows it.

"I have been under the necessity of bleeding and giving large quantities of opium to a patient in consequence of the severity of the pain produced by injection—still no inflammation was produced. It may be said that this was in consequence of the bleeding; but this was not the case: the pain arises from irritation in the nervous rather than in the vascular system, and inflammation does not readily follow it.

"When the fluid has remained five minutes and the canula withdrawn, there is no occasion to apply any thing to the part, and the patient may walk about as usual in the course of the day, if he feels but little pain. Should he, however, feel much pain, tell him to lie down and take his dinner that day, and a glass of wine after it, if he has been in the habit of doing so. After a few hours have elapsed, inflammation will probably come on. Above all, tell your patient to come the next day, that you may ascertain whether the inflammation, which is necessary for the cure of hydrocele, has been produced. If it has not, you must not despair of producing it. Take the part in your hand, and touch it here and there until the patient feel a good deal of uneasiness; then desire him to take a long walk, and an additional quantity of wine after dinner. In this manner you will generally succeed in producing such a degree of inflammation as will be sufficient to effect a cure. It sometimes, however, happens, that the injection will act so violently as to produce suppuration, particularly in constitutions disposed to inflammation. When there is danger of this, which may be ascertained by the great pain and redness of the scrotum, make an incision with a lancet into the part and discharge the contents, and if the opening so made be not large, the cure will be effected by the adhesive process. There are instances in which death has followed, and where life has been endangered by these consequences.

"This disease may be defined as a collection of water in the spermatic cord, and the part at which hydrocele of the spermatic cord takes place is in the tunica vaginalis, between the testicle and the abdominal ring, sometimes extending above the ring, and, on this account, not unfrequently mistaken for inguinal hernia. But the nature of the tumour may be known by pressing your finger along the parts until you have passed the abdominal ring, by its blue and semi-transparent appearance, by its being entirely unattended with pain, and by its not running into the abdomen like inguinal hernia.

"The best mode of treating this disease, is to make an incision into the tumour, (an injection in this situation would be both difficult and dangerous,) and to introduce your finger to ascertain if there be a communication with the abdomen, and then to introduce a small quantity of flour, to induce a slight inflammation internally. In this manner the cure of hydrocele of the

spermatic cord may readily be effected.

On introducing the Probe and Catheter into the Eustachian Tube by the Nostrils. From BUCHANAN'S ACCOUSTIC SURGERY, *pp.* 38.4*to.*

" Before you attempt to introduce the probe or catheter through the nostril into the Eustachian tube, it would be adviseable to make the experiment on the dried preparation, and then, if possible, on the recent subject, when you could give it the necessary curvature, preparatory to its introduction into the *living subject.*

" The experiment ought to be made on the same nostril and ear of the preparation or recent subject, as that on which you intend to operate. When the probe is just entering the mouth of the tube, the operator ought to mark it slightly in a line with the top of the nose, and from this mark measure off the length of the tube outwards, and mark it likewise.—These measurements will be of great use when you operate.

" It would likewise be adviseable to keep several probes ready curved and marked, some for the *right* and others for the *left* ear; and they should be of various assortments, to suit the age or size of the head of the patient. The great difficulty of introducing the probe into the Eustachian tube through the nostril, is the excessive irritability of the Schneiderian membrane with which it is lined.

" To overcome the disagreeable sensation produced by the introduction of foreign substances, it might be adviseable to inject tepid water into the nostril, and at the same time dip the probe into ol. amygd. warmed to the temperature of the blood. I have used this mode frequently with great success, causing little or no irritation to the patient.

" Having got the patient seated conveniently, introduce the probe into the nostril, and when you approach with the first mark towards the tip of the nose, cautiously endeavour to find the mouth of the tube, by directing the knob on the end of the probe outwards, and rather upwards, until it has entered the labia.

" Having entered the tube, observe the distance of the second mark, and proceed in the same manner until it is in a line with the tip of the nose, and feeling no resistance made to the probe, you may conclude that it has entered the tympanum.

" But beware of farther introduction; for, by rashly pushing the probe into the tympanum, you might injure the mechanism of the ossicula auditus, which, besides putting your patient to great pain, would throw discredit on the operation.

" If you wish to inject tepid water into the tympanum, provide a slender silver catheter, marked and curved similar to the probe, which should not exceed in diameter from the point to the first mark, that of the diameter of the knob of the probe.

" It should gradually increase in size from the first mark, for about a quarter of an inch in length, to the thickness of a crow-quill, and then be of an equal diameter to the end. This equal portion of the catheter to be made with a male screw on the outside, to fit a round flat piece of silver, with a female screw in its centre.

" This flat piece of silver, which has been called a frontlet, ought to have five or six holes in its edges, so that it may be secured in a proper position, by means of a ribbon passed round the head and through two of the holes of the frontlet, the ends of the ribbon to be then brought backwards and tied behind; or an

assistant might prevent the catheter from slipping into the tympanum, and at the same time secure the head of the patient during the operation."

PATHOLOGY OF THE SPLEEN, *from the Quarterly History of the Medical Sciences.*

"Even at this day, the office of the spleen is so little known, that perhaps every fact concerning it, however inconsiderable, is deserving of attention. On this account, the following case of enlarged spleen has been summarily drawn up, and accompanied by a few brief remarks:

"*Case.*—A mongrel, the offspring of a Newfoundland dog and a pointer bitch, in the seventh year of age, had, for the two years previous to his death, been troubled with a cough, which was aggravated by running. Within the last three or four weeks of his existence, the cough disappeared, and left behind it a wheezing and breathlessness, much increased by any thing that agitated him, and after that he was hardly ever able to lie down; and if he chanced at any time to fall asleep when in a sitting posture, he often fell, but instantly sprung up again. His body had become emaciated, his eyes dim and large, and his countenance old-like and withered; his feet and legs inclining to swell; his abdomen hard and tumid, and more so after eating, particularly on the left side; appetite continued, but he ate sparingly and often; his sight and smell were imperfect, but his hearing as quick as ever. From stupidity he had lost all idea of cleanliness. His stools latterly were thin and bilious; his breath was fœtid; his urine at times plentiful. His size was that of a pointer. In this state he was hanged. On laying open the thorax, the lungs and heart were found swimming in water. In some places the former were hard and swelled, and glued to the left side and to the diaphragm, and when cut open showed a whitish substance resembling white or yellowish dry rotten wood. One lobe was of a dark or purplish colour, and as firm as a piece of liver; but in other parts the lungs were not diseased. The heart was in its natural situation, and of its usual size. Close to it, on its left side, was a whitish bag, of the same size as the heart, which had an elastic feel, and evidently contained a fluid. On making a small opening into it with a scalpel, a fluid, like yellow serum, sprung out to the distance of two feet, and on laying this bag open its inner sides showed an incrustation, in appearance like yellow rotten wood, only finer in its grain. Not a drop of water was contained in the abdomen. The liver, the intestines, and kidneys were quite sound. The stomach bore a great resemblance to the colon, being long and narrow. The gall-bladder contained hardly any bile. The spleen was prodigiously enlarged, and in appearance five times the size of a cow's. It was quite solid, and of a dark red colour, seeming to contain nothing but blood-vessels, immense in number and of very small size. The vessels that supplied it seemed to be of their natural size. It covered the whole surface of the intestines, and seemed to be in a state of rapidly progressive enlargement. It was thought that this dog's complaints were occasioned by his being obliged to lie all night in a cold damp out-house, after having been always accustomed to a warm dry lodging. When the disease was still in its infancy, he was removed to a better situation, yet it continued its progress.

It would seem from this, that the enlargement of the spleen had some connection with the diseased state of the stomach; in short, the spleen

seems to have been a diverticulum for receiving that blood which could no longer be admitted into the vessels of the stomach. At other times, when the spleen resists enlargement, the vessels of the stomach give way, and hæmatemesis ensues. I have seen several cases of elderly people which I suspected were of this nature. Diemerbroeck thinks, that when the liver is any way obstructed, there may be a retrograde motion of the splenic vein, by which its blood may be emptied into the stomach by the vasa brevia, or into the intestinal canals by the meseriac veins; and, on the contrary, when the blood does not find an exit in those ways, it will distend the spleen itself. In a case of diseased or schirrous spleen, Diemerbroeck saw three chamber-pots full of an ink-like fluid passed by stool. Many of the ancient authors have spoken of a connexion betwixt the stomach and spleen, and the same thing has been adverted to by some late German authors. It would be an easy matter to collect notices on this subject from books; but the investigation would be rather pedantic than useful.

Since the publication of Mr. Hutchinson's book on Neuralgia, the fame of the carbonate of iron has increased rather than diminished. We had all along intended to make some extracts from the work in question, but the almost every-day occurrence of cases, with the profession generally, with whom Mr. H.'s book is as well known as the Pharmacopœia. We shall, therefore, extract the following case taken from a quarterly journal,* in the discharge of our first intention; at the same time, we do not hesitate to say, that Mr. Hutchinson deserves well of his country, as much for his philanthropy, as his disinterestedness, in publishing his discovery for the benefit of mankind in general, without being influenced by those sordid views with which many are actuated, who deal less liberally either with the profession or the public.

Neuralgia, or Tic Douloureux, treated with Carbonate of Iron.—By Dr. Crawford, *of Bath.*—"Dr. Crawford, of Bath, has communicated the particulars of two cases of neuralgia treated with the remedy in question—one in his own practice, the other in that of Dr. Davis, of Bath. The first case was that of a lady, who became affected in the left side of her face, at the age of 69 years. The disease was moderate at first, and the intervals between the paroxysms of considerable extent; but after some time the disease became greatly exasperated, and the cessations from suffering of short duration. The complaint was subdued by the arsenical solution, and the patient remained free from suffering for two years. Then a slight relapse, and again relief for four years by the same remedy. At the end of this period the enemy renewed his attacks, but arsenic no longer availed. Dr. Crawford then commenced with carbonate of iron, in scruple doses three times a-day, gradually increasing the dose to a drachm. In three weeks from the commencement of this plan of treatment the disease gave way, and has not yet returned."

"Dr. Davis's patient was also a female, 65 years of age, affected with the diseases in the right-side of the face. She was cured by the carbonate of iron in a fortnight—two scruples night and morning."

"Mr. Thompson, of Sloane-street, has communicated to Mr. Hutchinson the particulars of some cases

* Medico-Chirurgical Review.

which are in favour of the remedy. We sincerely hope it may retain the reputation it has already acquired."

Anatomy of the Fascia Superficialis.—By Dr. J. D. GODMAN.*—The anatomy of fasciæ seems to be the least precise in the whole science, though it is of very great importance in many of the operations of surgery, and also in the discussions of physiology. Many pupils indeed revolt from the study of fasciæ, despairing of understanding it. We are therefore much indebted to Dr. Godman for the manner in which he has taken up the subject, and hope it will lead others to pursue similar investigations. According to Dr. Godman, the fascia superficialis covers, with more or less degrees of firmness and thickness, the whole trunk of the body, anterior as well as posterior, together with the thighs, till it is lost in the fascia musculorum, just above the elbow. We shall give a short specimen of Dr. Godman's details.

"As we approach the os pubis, near which it covers the spermatic ring and cord, the handle of the knife may be used to separate it from the tendons reflecting it, we obtain the fairest view of the real character and situation of the spermatic cord. The fascia receives a very considerable thickening near the pubes from the lamina of cellular substance exterior to it—and it is continued over the corpora cavernosa penis, as well as sends down a strong sheet into the scrotum, which has received the name of Camper's ligament. This portion descends obliquely in the direction of the cord, which it covers, and of the testicle which it surrounds. The external portion passes downwards, over the whole of Poupart's ligament to the upper part of the thigh, lying immediately under the integuments, and over the cluster of lymphatic glands and vessels, which fill up the depression below Poupart's ligament.—We may next raise the fascia superficialis from over the crest of the ilium, and pursue it backwards to the spine, and we may follow it downwards covering the whole of the gluteal muscles, and across covering the whole perineum.

"The platysma myoides is on the outside of the fascia, and in immediate contact with the integuments."

The fascia superficialis covers "the whole of the neck ascending in front of the edge of the chin, where it is lost.—As we pass towards the angle of the jaw, we find it rising higher—and extending towards the ear, so as entirely to overlay the parotid gland." At the posterior edge of the sterno-cleido-mastoideus it splits into two portions, "thus the muscle is inclosed in a distinct sheath, the same fascia forming both the deep and the superficial covering of the neck."

We do not vouch for the accuracy of all this, as Dr. Godman has a system to support, and may be, as is usual, unduly biassed; but it is a subject certainly well worthy of investigation.

* Philadelphia Journal, No. 12.

SCIENTIFIC INTELLIGENCE.

ASSOCIATION FOR THE PURPOSE OF WORKING THE MINES IN MEXICO.

This association was formed by some of the principal bankers and merchants, with a capital of one million sterling, to be applied for the purpose above stated, divided into 10,000 shares of 100*l.* each. It should appear from the prospectus, that such mines only have been chosen as have been already worked, and those too of the first importance; there will, therefore, be no such risks attending this speculation as is usually associated with mining. The parties have, of course, taken every precaution in regard to the protection of the government and the proprietorship. We refer to the prospectus itself for particulars, which may be had of any of the directors.

It has been a source of the greatest regret to enlightened men, that the riches of the world should ever have been deposited in the hands of the Spaniards, whose national character is imbued with so much lethargy and supineness—the great enemies to the advancement of mankind. The revolution which will now take place in that hitherto inhospitable land,

will be a fresh source of wealth to Europe, and a sure road to the improvement of the Mexicans themselves.

It is almost impossible to calculate on the advantages likely to be derived by this company from the arrangements they appear to have made, for what may not be expected from British capital, enterprize, and genius, in an almost primitive land, in which the precious metals are distributed with so lavish a hand.

To convey an idea of the ignorant and slovenly manner in which mining, as well as all other processes, have, in most instances, been conducted in Mexico, we shall give to our readers a few anecdotes and observations, which almost border upon the ludicrous.

When the ore is dug it is conveyed to the surface of the earth, either on the backs of men, called (tenatores) beasts of burden, or in leather bags. The tenatores may well, indeed, be called beasts of burden, for they frequently remain laden with a weight *of* 225 *to* 350 *pounds for* a *space of six hours*, exposed to a temperature of from 70 to 77° Fahrenheit. (A London porter would pronounce this impossible.) And, during this time, they ascend and descend several thousand steps, in pits of an inclination of 45°. To prevent their shoulders from being hurt (for the miners are generally naked to the middle), they place a woollen covering under this bag. We meet in the mines with files of 50 or 60 of these porters, among whom there are men above 60, and boys of 10 or 12 years of age. In ascending the stairs, they throw the body forwards and rest on a staff, which is generally not more than one foot in length. They walk in a zigzag direction, because they have found, from long experience (as they affirm) that their respiration is less impeded when they traverse obliquely the current of air which enters the pits from without. The leather bags are used either for drawing up the ore or the water—these bags are attached to ropes, which are drawn by horses; they seldom last more than eight or ten days, being destroyed by friction against the sides of the shaft. A bag full of water weighs about 1250 pounds, which is the work of *eight horses* to draw to the surface. Instead of stopping the course of subterraneous streams, and conveyiug the water to pits to be drawn off by machinery, they frequently direct it to the bottom of the mine, and at leisure withdraw it, at an immense expence, by the method above described. Neither pump, engine, or railway, is used by the miners. The immense wealth accumulated by individuals, notwithstanding such barbarous management, is scarcely credible. The former proprietors of the mine Valenciana, which this company have now acquired, were amongst the richest individuals in the whole world, and they drew their wealth from this mine in a very few years. The following is their history.

For a whole century this mine was deserted, until 1760, when a Spaniard, who went over very young to America, began to work this vein, in one of the points which had, till that time, been believed destitute of metals. M. Obregon, the name of this Spaniard, was without fortune; but as he had the reputation of being a worthy man, he found friends, who, from time to time, advanced him small sums to carry on his operations, and yet the expenses greatly surpassed the value of the metallic produce. With a passion for mining, equal to what some display for gaming, M. Obregon preferred submitting to every sort of privation to the abandoning his undertaking. In

the year 1767 he entered into partnership with a petty merchant of Rayas, of the name of Otero; could he then hope, that, in the space of a few years, he and his friend would become the richest individuals in Mexico, perhaps in the whole world? In 1768 they began to extract a very considerable quantity of silver minerals from the mine of Valenciana. In proportion as the shafts grew deeper they drew from the "*Pertinencia de Dolores*" enormous masses of sulphuret of silver, mixed with native and red silver. From that period till 1804, the mine of Valenciana has continually yielded an annual produce of more than 583,380*l.* sterling. There have been years so productive, that the net profit of the two proprietors of the mine has amounted to the sum of six millions of francs. M. Obregon, better known by the name of Count Valenciana, preserved, in the midst of immense wealth, the same simplicity of manners, and the same frankness of character for which he was distinguished previous to his success, when he began to work the vein of Guanaxuato, above the rabin of San Xavier, goats were feeding on the very hill which, ten years afterwards, was covered with a town of seven or eight thousand inhabitants. Since the death of the old Count, and his friend Don Pedro Luciano Otero, the property of the mine has been divided among several families; the two younger sons of M. Otero, each possessed, in ready money, a capital of six millions and a-half, without including the actual revenue from the mine, which amounted to more than 16,600*l.* sterling.

HOSPITAL REPORTS.

Guy's, *Jan.* 23.—The operation for tying the carotid artery was performed here this day, for aneurism of the vessel, by Mr. Key. It was rendered tardy and tedious, occupying upwards of an hour, in consequence of the diseased state of the artery, which had varied much from the original relative position.

All the Surgeons of the United Hospitals were present, with the exception of Sir A. Cooper, Bart., and the crowd of pupils was immense. The patient, we are informed, is as well as can be expected

Amputation at the Hip-joint.—This case is going on well—the patient is gaining strength, and in high spirits—the ligature has not yet come away—but a healthy pus, from the circumjacent parts, &c. forebode a successful result to the operation.

[*In the* new series *to this journal, a condensed view of* Hospital Practice *and* Occurrences *will be given Monthly; wherein cases only of more than ordinary importance will meet with attention; and gentlemen, on the spot, are already engaged at the various establishments of the metropolis, to forward us reports as these may occur, &c. &c.*]

MELANGE.

Preparation of Veratrine.—"They repeatedly digested the seeds of the *veratrum sabadilla* in boiling alcohol. These tinctures, filtrated whilst almost boiling, deposited, on cooling, whitish flakes of wax. They re-digested the matter which remained dissolved, after evaporating it to the consistence of an extract, in cold water: a small quantity of fatty matter now remained on the filter. The solution was slowly evaporated, and it formed an orange yellow precipitate, which possessed the characteristics of the colouring matter found in almost all the woody vegetables. On adding a solution of acetate of lead to the liquor, which was still deeply coloured, a new and very abundant yellow precipitate was immediately formed, which was separated by means of the filter. The liquor, now nearly colourless, still contained, amongst other substances, the acetate of lead, which had been added in excess: a current of hydrosulphuric acid was used to separate the lead. The liquor was then filtrated and concentrated by evaporation, was treated by magnesia, and again filtrated. The magnesian precipitate was digested in boiling alcohol. The alcoholic liquors gave, on evaporation, a pulverulent substance, which was extremely acrid, and possessed all the properties of the alkalis. This substance was at first yellowish; but, by solutions in alcohol, and subsequent precipitations, caused by pouring water into the alcoholic solutions, it was obtained in the form of a very white and perfectly inodorous powder."

Tetanus, treated with Oil of Turpentine. By B. Hutchinson.—Mr. Hutchinson has stated a case of tetanus occurring without

any evident cause, in a man long afflicted with epileptic attacks. He was a prisoner in the Nottinghamshire House of Correction. Mr. Hutchinson finding, on his visit one morning, that the patient presented most of the usual phenomena of tetanus, he abstracted thirty ounces of blood, and exhibited fifteen grains of calomel and two grains of opium. Next was administered a brisk purgative enema, containing one ounce of the oleum terebinthinæ, while a blister was applied to the back. The enema taking no effect, half an ounce of turpentine was ordered by the mouth every two hours. Next morning our author was agreeably surprised to find that the patient could open his mouth, and that the whole of the tetanic symptoms were dispersed. He had taken, in all, two ounces of the turpentine, which freely evacuated his bowels. We would hint our suspicion that the case was not one of real tetanus, from the great facility with which the symptoms gave way. However this may be, we have nothing to object to the mode of treatment employed.

On the Influence of the Nervous System on Digestion. By MM. Breschet, H. Milne Edwards, *and* Vavasseur.—In an interesting *Mémoire* by these gentlemen, lately read before the *Société Philomatique* of Paris, several experiments are detailed, which were instituted for the purpose of investigating the influence possessed by the nervous system on the functions of digestion: the following are the conclusions deduced, which, it will be observed, differ but little from those at which Dr. Wilson Philip had previously arrived:

1st, Simple section of the two pneumogastric nerves in the region of the neck, without loss of substance, and without separating the cut extremities, does not prevent digestion from taking place, but merely retards it in an evident manner.

2dly, Section of these nerves, with loss of substance, diminishes considerably, and much more than simple section, the digestive action of the stomach, but it does not appear to abolish it completely.

3dly, Section or destruction of a part of the spinal marrow, or ablation of a portion of the brain, acts in the same manner on the changes which the food undergoes in the stomach.

4thly, Narcotics, administered so as to produce coma, equally diminish the energy of the digestive powers.

5thly, It results, consequently, that every thing which diminishes the amount of nervous influence, transmitted to the stomach, weakens the digestive action.

6thly, and finally, When digestion is almost completely suspended by the section, with loss of substance, of the pneumo-gastric nerves, the digestive action of the stomach may be re-established, and the food contained therein be converted into chyle, by means of the galvanic influence, with almost as much rapidity, and as perfectly, at least in appearance, as under ordinary circumstances.—*Archives générales de Médecine*, Aout, 1823.

A new Remedy for excessive Salivation.—Dr. Kruger-Hausen, of Gostrow, has given an account of a man who, during a state of excessive salivation, attended with hæmorrhage from the gums, had employed the usual astringent gargles without effect; who afterwards covered his tongue and inside of his mouth and fauces with tar, by means of a brush. He soon afterwards recovered, without any other remedy. Mr. K. has since employed the same mode in several cases, with the effect of quickly removing this disagreeable consequence of medical treatment, without any inconvenience resulting from this new method.—*Rev. Méd.* Juillet, 1823.

Physiology.—M. Sergelas has communicated to the Academy the result of experiments which not only confirm generally the absorbent faculty of the veins (doubted by some physiologists,) but prove that certain substances are absorbed only by the veins, or at least, that they are so in greater abundance and more rapidly, than by the lacteal vessels. Various other able physiologists have been investigating different parts of the animal system, especially the nerves; but the description of their labours would be rather too technical for our general readers.—*Acad. des Sciences.*

Comparative Anatomy.—M. Geoffry Saint Hilaire's investigations on the subject of monstrosities, has led him to extend his researches to the organs of generation of birds; as well as in those of the monotremes, those extraordinary quadrupeds of New Holland, which unite the beak of a bird with the shoulders of a reptile, and respecting which it has hitherto been doubtful whether they are oviparous. M. Geoffry Saint Hilaire determines that they are so. —Messrs. Majendie and Desmoulins have been engaged in similar investigations concerning the lamprey.—*Ibid.*

MARRIED.—On the 26th inst. at St. Pancras' Church, S. Plombe, Esq. Surgeon, of Russel Street, to Miss Emma Lloyd, of Clapton.

DIED.—On the 22d inst. at Exeter, John Henry Beaumont, Esq., Surgeon to the Forces.

On the 26th inst. in Percy-street, James Hervey, M. D. Fellow of the Royal College of Physicians.

On the 27th inst. at the Surrey Dispensary, Southwark, at the early age of 28, Mr. Benj. Huggett, late Apothecary to the Institution.

ADVERTISEMENTS.

New Edition of Dr. Denman's Midwifery, with Life of the Author.

In one volume, 8vo. Price 15s. boards.

AN INTRODUCTION to the PRACTICE of MIDWIFERY. By the late THOMAS DENMAN, M. D., to which is prefixed a Biographical Sketch of the Author; partly written by himself, and completed from authentic documents supplied by the family.

Printed for E. COX and SON, St. Thomas's-Street, Southwark; Burgess and Hill, Great Windmill-Street; and John Cox, Berner's-Street, Oxford Street. Of whom may be had, the same Work, with Smellie's plates, selected and reduced from the large folio tables, with descriptions; price 1*l.* 1s., or in 4to., with Dr. Denman's plates, price 2*l.* 2s.

APHORISMS on the use of the Forceps and Vectis, by the same Author; neat Pocket Edition, with Portrait, 2s. 6d.

Just Published.

MAGENDIE'S PHYSIOLOGY, Part I. Price 6s. Part II. Price 6s. Translated from the French. By Mr. J. S. FORSYTH, SURGEON.

In a few weeks will be Published,

A MANUAL of SURGICAL OPERATIONS, containing Monsieur LISFRANC's new method of operating; to which is added, two Synoptical Tables of Natural and Artificial Labours. Translated from the French, with Notes. By Mr. WILLIAM COX, SURGEON.

NOTICE OF A NEW SERIES.

IN consequence of this Magazine having passed into other hands, the present Proprietors beg leave to announce that, henceforward, it will be published Monthly, that is to say, on the 10th of each month; (to contain 96 close printed octavo columns, in a neat wrapper, price 1s. 6d.) under the name of the MONTHLY MEDICO-CHIRURGICAL REVIEW, AND CHEMICO-PHILOSOPHICAL MAGAZINE.

The Proprietors having selected and engaged gentlemen of known and acknowledged literary and professional talent for the several departments of the above work, hope to be enabled, *Monthly*, to lay before their readers, a condensed and connected summary of all that is valuable and worthy of record in the Medical, Surgical, Chemical, and Philosophical world in general. Their labours, then, will principally consist in impartial reviews of the most recent, interesting, and important subjects, connected with the above branches of science; among which, will be comprised, the essence of the Monthly and Quarterly periodicals, foreign and domestic—the progress of Medicine, Surgery, Chemistry, and the Arts—Biographical Sketches of Eminent Scientific and Professional Men—select Miscellaneous matter, adapted to all classes of polite readers, &c. &c. With these various objects in view, the Proprietors hope, that a publication of this description will meet, from an enlightened and generous Public, that patronage and encouragement which, from the talent employed in the arrangement of its several departments, they are entitled to look forward to with some degree of confidence.

To be brief, they the more readily anticipate success in their undertaking, not from the varied character of the work alone, but from the determination they have formed to conduct it with vigour, spirit, and fidelity. Their pages will at all times be open to liberal controversy, but they will never permit them to be sullied by personal invective, illiberality, or abuse.

Contributions will be readily received, which are consonant with the views of this prospectus; and young and diffident authors will meet with that support, which is but too often withheld from them.

To the Medical Profession, the earliest and most correct practical information on all subjects connected therewith, either at home or abroad, will be communicated; and, for this purpose, a sufficient portion of our columns will invariably be devoted. Under this head will be embraced, the most striking occurrences of the different hospitals and other public institutions of the same nature. In our pages, the lovers of the Sciences, the Fine Arts and Polite Literature, will meet with a varied selection of interesting matter for their amusement, and information—and the general reader will find much to add to his already acquired stock of knowledge.

The first number of the NEW SERIES of the MONTHLY MEDICO-CHIRURGICAL REVIEW, AND CHEMICO-PHILOSOPHICAL MAGAZINE, will, as previously stated, appear on the 10th of March; until then, we beg leave to solicit a continuance of the favours of those gentlemen, in different parts of the country, who, hitherto, have countenanced the original design. In the meantime, COMMUNICATIONS, ADVERTISEMENTS, and ORDERS, are requested to be addressed to the Publishers, SHERWOOD, NEELY, and JONES, PATERNOSTER-ROW, &c. &c. &c.

Further particulars, &c. will be duly announced, through the medium of the Public Press, as well as by prospectuses, &c.

EXPLANATION

OF

J. WEISS'S

Female Dilators and Improved Hernia Knife.

The Female Dilator, by turning the handle to the right, will be found to open to any extent you may think proper. The Instrument A has a curve in it, which by some gentlemen is thought an improvement, as it does not take up so much room. The Hernia Knife, letter C, has a small button, which, when you wish to cover the cutting part of the Instrument, you must press with your finger and push it forward.

Mr. Weiss has the honor of laying before the profession, engravings of some Instruments lately invented by himself, and he is happy to say, approved of by several of the most distinguished Surgeons of the metropolis, as will be seen by the annexed letters. He has also to refer to the 12th volume of the Medico-Chirurgical Transactions, or to page 193 of the 13th No. of the Medico-Chirurgical Review, for some interesting cases published by Sir Astley Cooper, respecting the Female Dilator. Mr. Weiss feels it a justice to add, that the Female Dilator was suggested to him by that distinguished ornament of the profession, Sir Astley Cooper, Bart. and it is most gratifying to his feelings to find that the Instrument has proved so useful in the hands of others.

To Mr. Bransby Cooper Mr. Weiss is also indebted for the suggestion respecting the Improved Hernia Knife, Nos. 1 and 2 in the Plate; which gentleman very frequently mentioned to him that it would be a very great improvement if the cutting part could be covered when introduced: which he has effected to Mr. B. Cooper's great satisfaction.

Copy of a Case published by Sir A. Cooper, at page 236 of the 12th Volume of the Medico-Chirurgical Transactions.

Mrs. M'C———. I accompanied Dr. Nuttall and Mr. M'Nab to visit this lady, who had been for six months labouring under extreme irritability of her bladder, and such pain and interruption in passing the urine, as to lead those gentlemen to believe she had a stone in her bladder. Upon passing the sound I immediately discovered a stone, which Dr. Nuttall and Mr. M'Nab could distinctly hear. I informed the patient of the nature of her disorder, but assured her I could remove the stone without the use of any cutting instrument, and she had no difficulty in submitting to its extraction. In my return home, I called upon Mr. Weiss, in the Strand, and requested him to make me a speculum to dilate the meatus, and he, with his accustomed ingenuity, immediately suggested an instrument infinitely better devised than any I could have contrived for the purpose.

On the 7th of January, 1822, the above medical gentlemen accompanied me to the house of our patient, and at eight o'clock in the morning I introduced the dilator. At four o'clock in the afternoon of the same day, I removed the instrument, and readily introduced my finger iuto the bladder by the meatus, which was sufficiently dilated for that purpose, and directly felt the stone. I then passed a pair of forceps into the bladder, and immediately grasped the stone with them, and extracted it. The stone was soft, and its outer shell separated from its interior; I therefore passed a pair of flat forceps into the bladder, and removed the larger fragments of calculus; but for several days some small portions passed away with the urine.

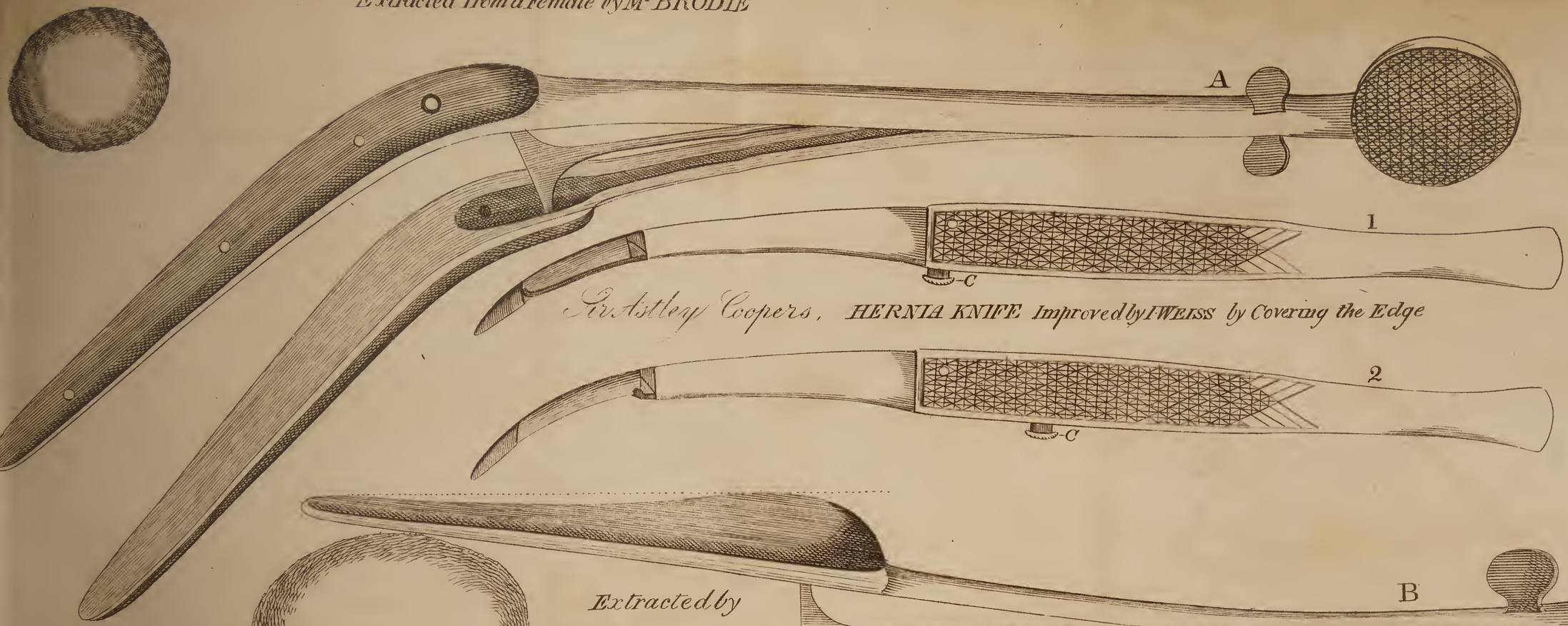
During the removal of the stone she was resting across the bed, unconfined by bandages.

For a few days after the operation, she had a severe attack of irritative fever, which required Dr. Nuttall's attention, and she was obliged to lose blood, and to have the abdomen fomented; but I had the pleasure of seeing her gradually restored to health, having never lost the power of retaining her urine; and, young, and but recently married, a constant distillation of urine from the bladder would have been an evil greater than death itself.

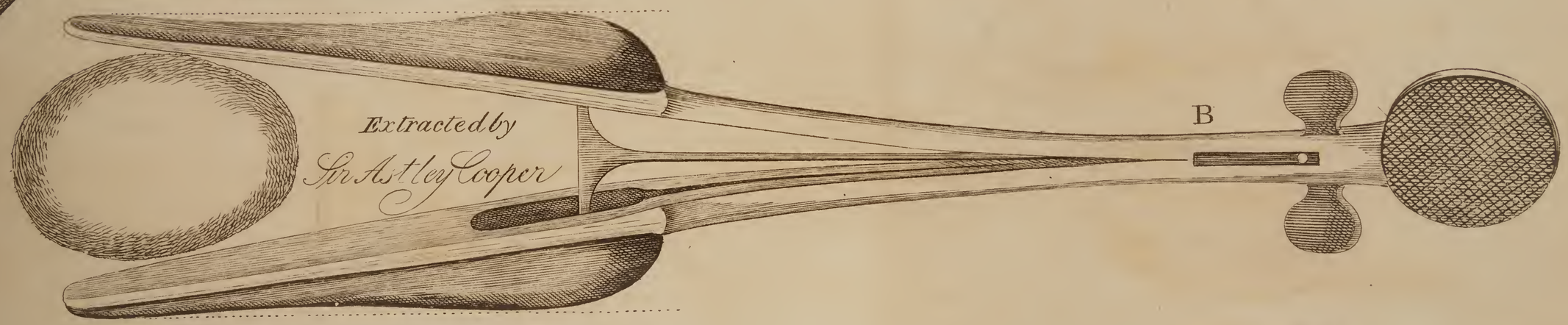
From the facility with which the meatus yielded to the dilator, in the foregoing case, it seemed that no absolute necessity existed for the lapse of several hours before the instrument was withdrawn, and the attempts at extraction made; and I therefore determined in a future case, to dilate the meatus for a few minutes only, and then to extract any extraneous body which the bladder might contain.

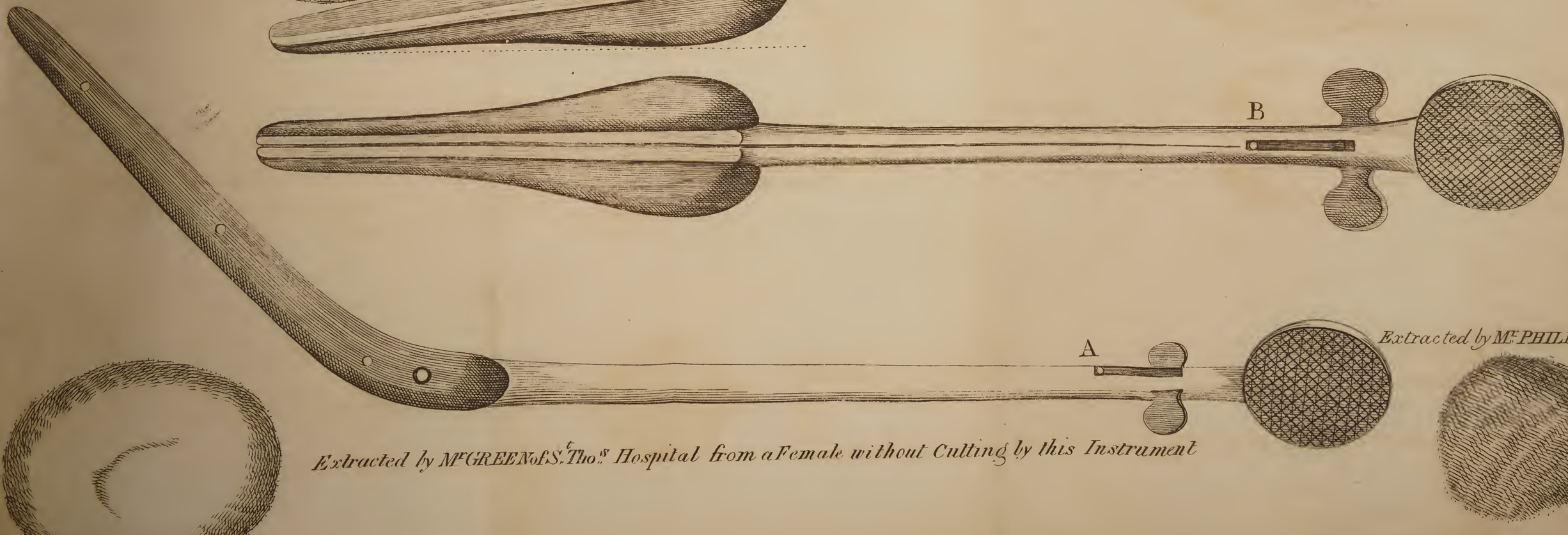
Extracted from a Female by Mr BRODIE

WEISS
Surgical Instrument Maker
62 Strand London
his New Invented Female Dilator



Sir Astley Coopers, HERNIA KNIFE Improved by WEISS by Covering the Edge





Extracted by Mr PHILLIPS

Extracted by Mr GREEN of S.t Thos Hospital from a Female without Cutting by this Instrument

22, *Lincoln's Inn Fields,*
May 16th, 1823.

SIR,

I have great pleasure in offering my testimony to the utility of your Instrument for dilating the female Urethra, and I shall be happy if the following case should contribute to recommend it to the notice of Surgeons.

Mary Wallace, thirty-one years of age, of a delicate frame and irritable constitution, was admitted into St. Thomas's Hospital on the 24th of last October, with well marked symptoms of stone in the bladder. The presence of the calculus was ascertained by sounding; but the operation was deferred in consequence of her being out of health, until the 22nd of November. On that day I introduced the dilator, and separated the blades until the patient complained of pain; and then waiting till the uneasiness had subsided, I again increased the expansion of the instrument by means of the screw, till pain was reproduced. In the course of a few minutes the painful sense of stretching and distension was relieved, and I proceeded with the dilatation. In this manner regulated by the feelings of my patient I continued gradually and cautiously to enlarge the meatus during two hours and a half. I was then enabled to introduce with ease my fore finger into the bladder; and finding that the calculus was in a favorable position, I introduced a pair of straight forceps, without waiting for further dilatation, and readily seized the stone in its long axis. I proceeded immediately to the extraction, but from the size of the calculus, I was unable to bring it readily through the meatus, and during this attempt she complained of much greater pain than at any time during the dilatation. As I held the stone in the most favorable position, I was however unwilling to quit my hold, and with moderate force, (at least with no more than is ordinarily required, and in no longer time than is frequently necessary in extracting a large sized stone in the operation of lithotomy) I succeeded in extricating the calculus. It proved to be of considerable size, as the subjoined admeasurement will fully shew.

She seemed much exhausted by the operation; and this was followed during the first few days by considerable constitutional irritation, and by symptoms indicating abdominal inflammation. Under the prompt and active measures however, which were taken, she was gradually restored to health. It is particularly worthy of notice that she passed her urine freely during the whole time; and that she was able in the course of twelve hours after the operation, to hold her urine more or less perfectly, and to discharge it voluntarily; and that the dilatation of the meatus left ultimately no weakness nor loss of power in retaining her urine.

The above case is I think, a gratifying proof of the facility with which even a large calculus may be extracted by the aid of the dilator. The operation might have been effected with less inconvenience had the dilatation been carried on somewhat longer; and I do not doubt that the enlargement of the meatus might be accomplished in much less time without any difference in the result. The subsequent inflammatory affection and accompanying constitutional irritation I should be disposed to attribute much more to a peculiarity in the constitution of the female

than to any circumstances necessarily connected with the operation. The result of this case, as that of others, evinces in the circumstance that the patient was relieved without producing incontinence of urine, a decided superiority to the use of the knife, as it regards this essential point.

I am, Sir,

Your obedient Servant,

JOSEPH HENRY GREEN.

Mr. WEISS,
Surgeon's Instrument Maker,
STRAND.

Pall Mall, 17*th April* 1823.

SIR,

I have the satisfaction to inform you I have used the instrument you invented for dilating the female urethra, and I have found it answer extremely well. I dilated the urethra with great ease to allow of the introduction of a pair of forceps, with which I extracted a stone larger than a French bean of the mulberry kind, which had been in the bladder four years, and had given the woman great pain; the bladder for many months was so irritable, she was obliged to use a catheter to prevent the acute pain she always felt from the efforts made to expel urine.

I consider your instrument of great utility, and I hope it will be generally used; and that the female part of the creation will in future (by an early use of it) avoid the usual operation which was almost always followed by an involuntary discharge of urine during the remainder of their lives.

I am, Sir,

Your obedient Servant,

JOHN PHILLIPS.

To Mr. WEISS.

16, *Saville Row*, *May* 21, 1823.

SIR,

I extracted the calculus which I shewed you lately, from a female patient in St. George's Hospital, by the process of dilating the urethra. I employed for this purpose the instrument which you invented and which has been used and recommended by Sir Astley Cooper. The dilatation was effected very readily, but gradually, in the space of twenty-four hours. The patient suffered little inconvenience afterwards, except from incontinence of urine, which however, ceased to trouble her in less than a fortnight from the time of the operation.

I am, Sir,

Your obedient Servant,

B. C. BRODIE.

Mr. WEISS,
62, STRAND.

J. BURSLEM, Printer, Blackfriars Road.